



**UNIVERSITY COLLEGE LONDON
FACULTY OF THE BUILT ENVIRONMENT
BARTLETT SCHOOL OF PLANNING**

**A STUDY OF PUBLIC CONSULTATION AND PARTICIPATION
IN LOCAL DECISION-MAKING**

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Abstract

A STUDY OF PUBLIC CONSULTATION AND PARTICIPATION IN LOCAL DECISION-MAKING

This paper examines the potential for participatory decision-making in coastal management and the extent to which present consultation and participation methods are succeeding. A case study of Slapton Sands provides an insight into the reality of decision-making faced by coastal managers at the local level. In recent years the A379, which runs over the shingle bar, has been damaged as a result of its close proximity to the sea. English Nature, local government departments, business owners, holidaymakers and the local population have different views on how this coastal stretch should be managed. The future of the road raises political, environmental, social and economic issues. Whilst the outcome of the road's future has yet to be determined, this paper examines how the decision-making process to date has involved the local community and suggests how the participatory process could have been improved.

Coastal managers are facing the challenge of involving local coastal communities in decisions about their futures when managed retreat may become the preferred option from an environmental and financial point of view. Coastal management decisions will require the co-operation, understanding and popular acceptance of coastal communities. Trust and fairness of treatment must be integral to the involvement of local communities in collaborative decision-making. This paper proposes that deliberative dialogue between all interested parties will become increasingly necessary. Dialogue should be a two way process and the aim of any participation process should be to move away from a unidirectional flow of discussion. Harnessing existing communicators such as local business owners could be key to dialogue and consensus building within some local communities.

The findings of this research have direct implications for other coastal areas, in terms of managing coastal flooding and erosion now and in the future. The study is also relevant to locally based decision-making exercises outside the arena of coastal management.

1 INTRODUCTION

This paper is based on the application of the four concepts of democracy, participation, collaboration and sustainability to coastal management (Table 1).

Table 1. Concepts to be Applied to Coastal Management

Concept	Definition	Intended outcomes
Democracy	Government by the people exercised either directly or through elected representatives.	Having a voice in decisions that are taken.
Participation	Involvement by interested parties in decision-making.	Could be in the form of public meetings or newsletters. Voicing opinions through public meetings, letters etc. Ideas being taken on board by those in "power."
Collaboration	Different groups working together in a joint intellectual effort.	Working towards consensus. Deciding on common objectives and a common approach.
Sustainability	Meeting the needs of the population today without compromising the ability of future generations to meet their needs.	Taking decisions that will not be economically, environmentally or socially expensive in the long-term.

1.1 Aim

To explore how coastal managers are collaborating with coastal communities in planning for future sea level rise.

1.2 Objectives

1. To investigate how decision-makers are enabling the interested general public to participate in the decision-making process.
2. To examine the effectiveness of different forms of public consultation and public participation in local level decision-making.
3. To propose some guidelines for local authorities and other decision-making bodies when engaging the public in decision-making.

1.3 Key Questions

- a. Do people want to be involved in local decision-making?
- b. What methods of public consultation and participation are being used and which methods are successful in terms of;
 - allowing various interest groups to effectively explain their viewpoints?
 - enabling the public to comprehensively understand all sides to the debate?
 - providing democratic decision-making?
- c. Is trust an important element to public consultation?
- d. How could methods of public consultation have been improved in the case of Slapton Line?

2 LITERATURE REVIEW

2.1 Sea Level Rise and Climate Change

Climate change is affecting the coastline of Britain. Since the 17th century average temperatures in the United Kingdom have risen by 0.7 degrees Celsius, with the greatest increase in temperature (0.5 degrees Celsius) occurring in the 20th century (UK Climate Impacts Programme, 1998). The most recent decade (1988-1997) has recorded the highest frequency of severe gales since the series began in 1881. Sea levels around the UK are now about 10cm higher than they were in 1900 (Proudman Oceanographic Laboratory quoted in Environment Agency, 2005). Current estimates by the United Kingdom Climate Impacts Programme (1998) indicate that global sea level (as well as sea level around the UK) is likely to rise between 12cm and 67cm between 1990 and 2050 with global sea level rising between 2cm and 9cm per decade (Table 1). Mean sea level is predicted to be at least 20cm higher by 2080 (low emission scenario) and may be as high as 80cm above present level (high emission scenario) (Scott Wilson Report, 2004).

Table 2. Global Climatic Change estimates for the period centred around the 2050s for the four UKCIP98 scenarios

Scenario	Temperature Increase (degrees C)	Sea Level Rise (cm)	CO ₂ Concentration (ppmv)
Low	0.9	12	467
Medium-low	1.5	18	443
Medium-high	2.1	25	554
High	2.4	67	528

Changes in global temperature and sea level are calculated with respect to the 1961-90 average. The four climate change scenarios predict a range of future global warming rates from 0.1 to 0.3 degrees Celsius per decade. Taken from UK Climate Impacts Programme, 1998.

Despite uncertainties about future climate prediction, including the rate of greenhouse emissions growth, the sensitivity of the climate system to human interference and the potential for rapid climate change, the UK Climate Impacts Programme 1998 predicts wetter winters, increases in climate variability and increases in extreme weather events. "The current line of defence cannot be guaranteed under such conditions, not at least without huge expenditures, much disruption to the natural character of the littoral, and

uncertain outcomes for human livelihoods and well-being" (Redesigning the Coast Workshop, 2002). Either more sustainable approaches to coastal defence and flooding are required or the acceptance that erosion and flooding episodes will become increasingly expensive.

2.2 Future Shoreline Management

Where there is no human intervention, the soft coast of Britain can adapt naturally to sea level changes by changing rates of erosion and accretion resulting in plan and profile changes to beaches and cliffs. However, in cases where there have been human consequences of changes to the coastline, human intervention has more often than not sought to slow or stop the seas encroachment on to the land.

With rising sea level on many stretches of Britain's coastline predicted, on a national level the option of managed retreat and using natural sea defences seems the straightforward policy option. However, on a local level, not maintaining the current line of defence has serious economic, social, political and environmental consequences.

The challenge facing coastal managers is to create a line of defence that is robust and deliberately designed to cope with land use pressures, all manner of unpredictable coastal change, and socially agreed patterns of future coastlines (Redesigning the Coast Workshop, 2002). However, "the prevailing cultural attitude is not sustainable and does not accept the practical implications of sustainability, particularly in terms of making personal sacrifices such as accepting the inevitability of erosion or flooding" (Treby and Clark, 2004). Coastal managers are facing the challenge of enabling the affected public to participate in local decision-making and facilitate the change of largely unsustainable attitudes.

Policy Shift

2.2.1 Europe

The 2001 Water Framework Directive forms the background to future Shoreline Management Plan implementation. The Water Framework Directive, 2000/60/EC (WFD), is a piece of European water legislation that aims to establish a new integrated approach to the protection, improvement and sustainable use of Europe's rivers, lakes, estuaries, coastal waters and groundwater. "The value and future role of participation have now acquired renewed importance and urgency with the introduction of statutory participatory coastal zone management inherent in the requirements of the 2001 Water Framework Directive" (Treby and Clark, 2004).

The four coastal erosion policy recommendations emerging from the two year European EUROSION study (commissioned 2001) are:

1. Restoring the sediment balance and **providing space for coastal processes**
2. Internalise coastal erosion cost and risk in planning and investment decisions
3. **Make responses to coastal erosion accountable**
4. Strengthen the knowledge base of coastal erosion management and planning

2.2.2 United Kingdom

The Futurecoast study, conducted by Halcrow, 2001 was commissioned by DEFRA (the Department of the Environment, Fisheries and Rural Affairs) in order to aid understanding of the evolutionary nature of the UK coastline and make predictions over a hundred year period. Until recently, 5-10years has been the usual period of forward planning for the coastline. The results of the Futurecoast study will feed into the revision of the Shoreline Management Plans and help determine a long-term vision of flood and coastal defence in the United Kingdom.

The Flood Management Division of DEFRA is to replace its Strategy on flood and coastal defence published 1993 with a new strategy on flood and coastal erosion risk management. The DEFRA consultation paper "Making space for water" highlights the potential policy shift on the issues of coastal flooding and erosion. Details of this policy

shift (Table 3) contrasts with the approach of DEFRA prior to 2004. As coastal defences are breached, damaged or threatened, managed realignment will become a more attractive policy option (Redesigning the Coast Workshop, 2002).

Table 3. Characteristics of DEFRA's approach to coastal management

Pre 2004	Post 2004 – Foresight and Making Space for Water
<ul style="list-style-type: none"> • Hold the line • Modest managed realignment • “Tit for tat” nature conservation policy on the EU Habitats Directive • Use of Cost-benefit Analysis (CBA) and points scoring system for project justification • Strong intervention by Internal Drainage Boards and Local Flood Defence Committees in the final design of schemes • Local authority autonomy over coastal protection and planning • Modest use of Shoreline Management Plans with a general attempt to maintain the status quo 	<ul style="list-style-type: none"> • Change the coast unless hold the line is unavoidable • Make space for water • Use the planning process as a land-use control device by implying inappropriate development will pay for rights and accepting that insurance cover will not always be available • Compensation not mentioned in this policy flux • CBA (Cost Benefit Analysis) risk criteria in multi criteria analysis and points scoring much more important as guides to project management • Shoreline management plans much stronger documents guiding PPG20/25 • Local authorities possibly in a weaker role with more likelihood of a strong Environment Agency (EA) influence over coastal defences • Basically a policy rewrite. Stakeholders will be expected to be co-responsible for coasts with a willingness to reconsider the shoreline change implications of coastal communities to retreat and realignment • English Nature forced to reconsider coastal habitats and EA now financing new coastal options

Taken from Tyndall Working Paper b, 2004

The Government's Foresight project on Flood and Coastal Defence also examines a long-term perspective on coastal flooding. The aim of the project is “to produce a challenging and long-term (30 - 100 years) vision for the future of flood and coastal defence in the whole of the UK that takes account of the many uncertainties, is robust, and can be used as a basis to inform policy and its delivery” (Foresight Future Flooding

report, 2004). The project advocates a long-term strategic approach to dealing with a changing coastline with the key message that:

1. Continuing with existing policies is not an option – in all the scenarios considered, flooding risks grow to unacceptable levels
2. Flooding risks need to be addressed now in order to leave room for the creation of new coastal patterns over the coming three generations and beyond

(quoted from Milligan, 2004)

The Foresight project challenges existing UK coastal policy by acknowledging a changing coastline and the uncertainty in predicting that change. Planning for the future in relation to the coast is becoming increasingly important.

At present, policies for managing the coastline are fragmented and there is a lack of co-ordination between the key partners. The UK does not have a legislative framework for integrated coastal management. “These shortcomings are exacerbated by other factors such as there being few mechanisms in place for foresightful democracy (in terms of planning for the long-term future), sensitive compensation and proactive planning strategies to allow effective and progressive changes on the coast to occur” (Tyndall Working Paper b, 2004).

2.3 Public Opinion

In the dominant public mind there is an expectation of coastal stability whilst official policy is changing toward managed realignment. Treby and Clark (2004) believe that, “Shoreline Management Plan participatory processes undertaken in the UK between 1996 and the present have served to reveal that sustainable policy options may not be acceptable to the public, and hence management practices continue to reflect present unsustainable attitudes rather than those of the shifted policy options.” Treby and Clark state that this lack of acceptance may in part be due to the public not *needing* to engage with sustainable action given that they are protected by insurance if their homes flood and the government continues to provide resources to “hold the line” against coastal erosion, in the majority of cases. The public may also be uncomfortable with the notion of sustainability and the current participatory structure is ill designed to provide a framework for leading them towards a sustainable consensus. “There is not yet any

clear public understanding nor public acceptance of retreat as a coastal management option. Indeed, it may be necessary to slow down the process of policy shift in order to build up understanding and acceptance for these changes (Tyndall Working Paper a, 2004). Treby and Clark (2004) make the point that in the UK the public manifestly hold a strong faith in the ability of the authorities (often government) to stop the sea from reaching the house, removing the beach, or flooding their road. Thus they fail to confront the reality at a personal level, apparently taking comfort in unrealistic assumptions of what other people can and should do to save them.

2.4 Sustainability and Coastal Management

Sustainability in relation to flood and coastal defences can be defined as:

“The degree to which flood and coastal defence solutions avoid tying future generations into inflexible and or expensive options for defence. This will usually include consideration of interrelationships with other defences and likely developments and processes within a catchment or coastal cell. It will also take account of long-term demands for non-renewable materials.”

(from Glossary of the Flood and Coastal Defence Project Appraisal Guidance: Overview FCDPAG1 by Ministry of Agriculture Fisheries and Food quoted in Tyndall Working Paper b, 2004).

The “Redesigning the Coast” workshop in 2002 (by the Centre for Social and Economic Research on the Global Environment and Tyndall Centre) assessed the science, economics, administrative arrangements and politics of coastal governance in England and Wales. This workshop concluded that only if there is a significant shift in the current manner of handling such issues will the future management of a sustainably evolving coastal structure and society be adequately addressed on the temporal and spatial scale required. All too often, local interests seem to be in direct conflict with official policy. “There is a great need for statutory bodies to get across to stakeholders the concept of a changing coastline – the message that the coastline will not remain static since the coastal zone is intrinsically a dynamic place” (Milligan, 2004). When policy formulation precedes consultation the decision-making process is said to be front loaded rather than addressing issues as they arise. In a time when coastal policies are being reviewed it

seems opportune to have early stakeholder participation in the formulation of the new policies.

As English Nature state in their Maritime Strategy (2005) the cultural shift from coastal defence to coastal management needs to be completed in order to adapt to coastal change. "Coastal communities need to understand policy change and be partners in helping to make the policies work by redesigning their populations and settlements (Tyndall Working Paper b, 2004). Coastal flooding and erosion raise issues such as social fairness, economic and social well-being. There is a need for increased interaction between residents and decision-making bodies. Mechanisms are necessary to facilitate dialogue and engage stakeholders in the decision-making exercise.

Sustainable coastal management will only be achieved through an integrated approach where planners, legislation, individuals and bodies representing different interests work together to create a shared vision for the future of coastal areas. Within Agenda 21, it is asserted, "one of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making" (Fletcher, 2003). Treby and Clark (2004) state that "the path to sustainability, via the tool of participation, is reliant on two components: consensus and communication. Consensus building tends to replace an inclination towards personal choice and individual good with the more sustainable concept of societal loss and gain."

2.5 Participation and Democracy

2.5.1 The UNECE Convention

The UNECE (United Nations Economic Commission for Europe) Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters was adopted on 25 June 1998 in the Danish city of Aarhus. The Convention is an elaboration of principle 10 of the Rio Declaration that stresses the need for citizens' participation in environmental issues and for access to information on the environment held by public authorities (Annan K, 1998).

The Aarhus Convention focuses on interactions between the public and public authorities and is concerned with government accountability, transparency and responsiveness. The Aarhus Convention grants the public rights and imposes on Parties and public authorities obligations regarding access to information and public participation and access to justice.

2.5.2 The Modernisation of Local Government and Public Participation

In recent years a new governance system has emerged in the United Kingdom characterised by state fragmentation and deregulation. The government takes an 'enabling role' and is crucial in developing co-operation and partnership amongst actors involved in what has been termed the 'new governance' system (Allmendinger and Tewdwr-Jones, 2000). Governance is the ordering of society by government, public, private and voluntary agencies in the growing phenomenon of state fragmentation. The private sector has had an increasingly powerful role with the increase in number of quangos and other centrally appointed bodies.

As Milligan (2004) states "the notion of governance means shared responsibility for managing public and social affairs through various forms of networks and partnerships, and a capacity to learn and to adjust. It is the more informal arrangements and the evolutionary scope of governance that is the hallmark of the notion".

In the movement away from government and towards governance, public disillusionment with local and national government has grown. Falling numbers of those using their electoral vote could be a result of increased public disillusionment. One of New Labour's stated aims is to renew local democracy. Since a Labour government returned to power in 1997 local authorities have been encouraged to develop stronger links with their electorate, and to enhance public participation in policy and implementation (Darke, 2000). New Labour has been concerned with public participation and the need to "re-connect with citizens" in the case of local government (DETR, 1998).

The list of stakeholders involved in planning includes: developers, neighbours, civic societies and local interest groups, the local planning authority dealing with policy or planning applications, other 'interests' within local councils (including politicians and

officials representing education, social services and other committees), strategic planning authorities (county), national bodies linked to government (such as the Environment Agency), the Department for Environment, Transport and the Regions (DETR), local voluntary organisations and national bodies not linked to the government (e.g. Friends of the Earth).

“Planning involves deciding between opposing interests and objectives “ (Nadin and Cullingworth, 2001). The land use planning system is perceived to have a bias towards businesses and central government at the expense of local authorities and the general public. Quality of public involvement in decision-making is often questioned which leads to concerns over democracy and legitimacy. The aim of decision-makers should be to achieve publicly supported outcomes that are democratic in production. There is an “underlying assumption that if citizens become actively involved as participants in their democracy, the governance that emerges from this process will be more democratic and more effective” (Irvin and Stansbury, 2004).

In the past, coastal management decisions and policies have been made in relation to individual sectoral interests such as transport or environment. This sectoral approach to the coastline is reflected in the current UK policy framework. Historically, authorities have used their statutory powers to undertake coastal defence works. It is becoming increasingly apparent that a piecemeal approach to managing the coastline should be abandoned in favour of a more strategic integrated approach that examines the coastline on a much larger spatial and temporal scale. Over a decade ago the Intergovernmental Panel on Climate Change (IPCC) identified integrated coastal management as the most promising approach for a response to the changes that occur due to sea level rise (Olsen, 1998 quoted in Milligan, 2004).

One of the new legal duties given to plan-makers, by way of the Planning and Compulsory Purchase Act, is to contribute to the objective of sustainable development, which recognises dynamic change and natural processes. Participation and sustainability are closely linked. The process of consensus building often requires stakeholders to sacrifice part of their interests to other stakeholders or to future generations. “It is argued that this sacrifice will be made more effectively if those concerned have been involved in reaching the decision, their engagement in the

management process having enhanced their appreciation of the issues and associated tradeoffs" (Treby and Clark, 2004). As well as being a fundamental element of democracy, public involvement broadens ownership and makes decisions more accountable, legitimate and democratic. Non-participatory forms of policy making have been labelled as illegitimate, ineffective and undemocratic, both by the politicians and the stakeholders themselves (Bulkeley and Mol, 2003).

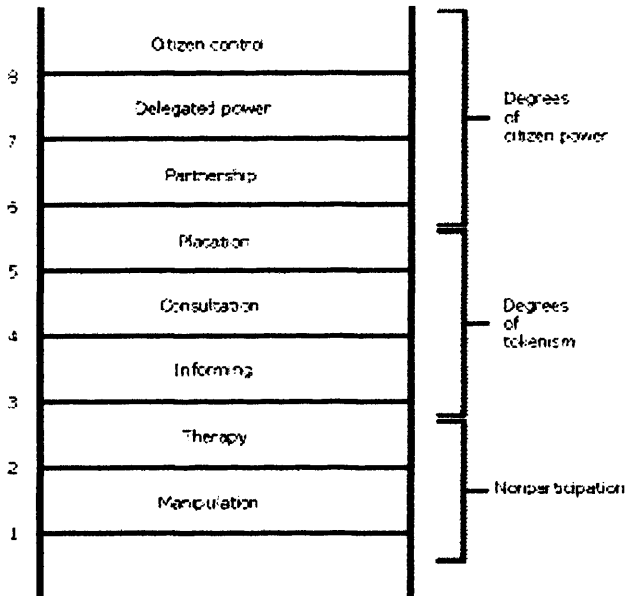
2.5.3 Forms of Public Participation

Public participation may take the form of dispersal of information, gathering information from the public, or promoting interaction between policy-makers and the public. Factors affecting public involvement include statutory requirements, attitudes to value, and public attitudes to value of public consultation and resource availability.

Arnstein's (1970) Ladder of Citizen Participation (Figure 1) is a model that demonstrates degrees in quality of public involvement. It is arranged as a ladder with each rung representing the degree of power the citizen holds.

Arnstein describes the type of "non-participation" represented by the lower two rungs on the ladder as attempts to 'educate' participants. The next two rungs allow participants to hear and have a voice, but they have no power to ensure that their voice has influence. At level 5 participants can advise, but the right to decide is retained by the agency. True participation begins where partnerships enable negotiation and shared decision-making responsibility at level 6. Arnstein considers that partnership working is most effective when participants have an organised and resourced base from which to work, and to which they are accountable. At levels 7 and 8 participants form the majority in decision-making arenas, or hold managerial power.

Figure 1. Ladder of citizen participation taken from Arnstein (1970).



One of the criticisms of the ladder is how public interest in the policy process is elevated above all others. However, the model still provides a useful tool to begin thinking about different levels of public involvement in decision-making.

Darke (2000) holds the pessimistic view that if a community are complacent then there is a strong argument for a top down approach to provide efficiency; stakeholder involvement exercises are time consuming and there is little point trying to engage the public if they have no desire to participate in decision-making. Irvin and Stansbury (2004) state that much literature on public alienation from the public affairs process has assumed that if only the right vehicle for empowerment and engagement were offered citizens would lose their cynicism toward government and actively support democratic processes.

Where participation is required then this should be in a proactive form rather than the passive absorption of information. “The formal decision makers thus need to take on a negotiating, rather than informing, role, in order that genuinely omnidirectional communication (which does not privilege expert knowledge over local knowledge and opinion) can occur” (Treby and Clark, 2004). O’Riordan and Ward (1997) believe that

mediation by participatory methods will only work if “participants are representative, treated with respect, assisted to organise and articulate information, are enabled to express their fears and feelings in as authentic a manner as possible, and appreciate the concerns and legitimate expectations of others.”

“The benefits offered by participation include widening the representation of interests involved in decision making, improving local ownership of strategies, enhancing the legitimisation of decisions, ensuring that projects meet citizen’s need and providing the opportunity for local knowledge to be included in decision making” (Fletcher, 2003). In deliberative democratic theory participant views in their raw state may be different from those following careful consideration of all viewpoints. Collective decisions should therefore be subject to informed debate and discussion before a collective opinion is formulated or decision made.

Table 4. Advantages of citizen participation in Government decision-making

	Advantages to citizen participants	Advantages to Government
Decision Process	Education (learn from and inform government representatives) Persuade and enlighten government Gain skills for activist citizenship	Education (learn from and inform citizens) Persuade citizens; build trust and allay anxiety or hostility Build strategic alliances Gain legitimacy of decisions
Outcomes	Break gridlock; achieve outcomes Gain some control over policy process Better policy and implementation decisions	Break gridlock; achieve outcomes Avoid litigation costs Better policy and implementation decisions

Darke (2000) believes that a participation programme may be successful if;

- there is clarity about the aims of participation from the start,
- politicians play a central role throughout,
- there is linkage between motives, objectives, and intentions with appropriate techniques/tools,
- there is clear interpretation of policy and implications for specific groups,
- procedures are identified for evaluating and acting on the public’s views.

In addition, Irvin and Stansbury (2004) state that ideal conditions for citizen participation include;

- Careful selection of representative group of stakeholders
- Transparent decision-making process to build trust among the participants
- Clear authority in decision-making
- Unbiased group facilitators
- Regular meetings
- Financial resources to support the group process through a potentially long learning and decision-making process

The Skeffington report 1969 states that planning authorities need to be proactive when seeking the views of those who are not active in civil affairs. The report suggested that community workers could engage the majority of people in their own neighbourhoods, at the shops or in the pubs. The report suggested that individuals at group meetings act differently to when they are approached on an individual level. The key to dialogue is to achieve people's trust by involving people on a one to one basis. "Winning the hearts of the citizens by meeting with them regularly and ultimately gaining their trust and friendship may be the only way for environmental regulators to promote new policies in communities where antigovernment sentiments runs high" (Irvin and Stansbury, 2004).

Information is needed at a general level at the outset before the preliminary consultation as improved understanding is needed on technical issues to enable effective participation. Providing participants with information before and following consultation can be seen as a three-stage process of inform, consult, inform. Treby (1999) goes further to suggest that there should be five stages in the participation process:

1. General education (inform expert and non-expert)
2. Listening to consultees views and priorities on the issues (consultation)
3. Identify technical implications of response options (inform)
4. Discussion of stakeholder priorities related to the issue and response (consultation)
5. Articulate the outcome of the consultation process (inform)

Quoted in Treby E. & Clark M. (2004).

The wheel of participation (Figure 2) is a model for public involvement in decision-making that builds on Arnstein's work. Public involvement is viewed as a process where the various elements including education, therapy, informing etc. become necessary at different stages in the consultation/participation cycle.

Figure 2. The Wheel of Participation

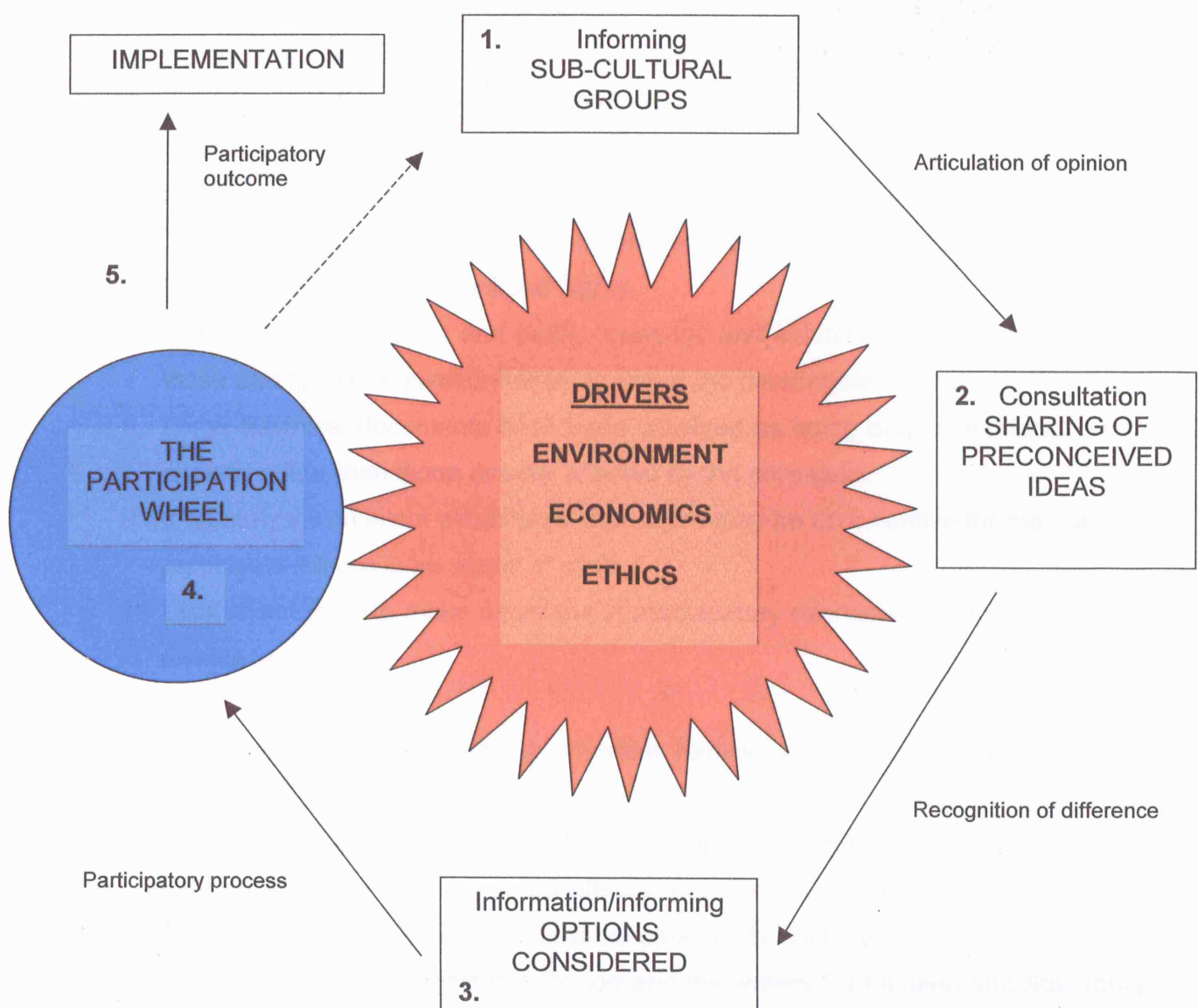


Taken from Treby and Clark 2004 reproduced from Treby 1999

The wheel of participation is a fundamental cog in the coastal zone management model (Figure 3) proposed by Treby (1999).

Figure 3. An operational coastal zone management model

NATIONAL CULTURAL VALUES
LEGISLATIVE AND REGULATORY BACKDROP



After Treby, 1999, taken from Treby and Clark (2004)

2.5.4 Some Pitfalls with Public Consultation

Emerging from the literature is a number of weaknesses that have been identified in some studies of public consultation.

1. Sometimes undertaken on a predetermined agenda with no public involvement in the formative stages.
2. Individual and group participants in the planning process have different amounts of power (Darke, 2000). The weight given to concerns raised by businesses, government and the public may be uneven.
3. Some writers have argued that popular involvement in policy making would lead to poor decisions because 'uneducated' people lack judgement, and they have warned against the 'tyranny of the mob' (quote by Burke in Darke, 2000).
4. Some powerful groups will always promote their interests above all others.
5. Limits on resources available to the planning system are one barrier to the even-handed treatment of stakeholder groups and in-depth public involvement.
6. Despite statutory obligations for public consultation, public consultation is not always taken seriously or valued highly.
7. Random questionnaires and public meetings and exhibitions limit participation to those that fill in the questionnaires or attend the meetings/exhibitions.
8. Large technical documents have been criticised as being only understandable by experts rather than those directly affected by the proposals.
9. If an early vision is not established then there may be no incentive for the public to participate if there is no sense of crisis.
10. Lack of authority to make decisions in participatory exercises can increase public dissatisfaction.

The broad question arising from the literature review is "how are coastal managers collaborating with coastal communities in planning for future sea-level rise?" The objectives and key questions stated in Chapter 1 are derived from this broad question. A case study will examine the nature and effectiveness of present-day public involvement in coastal decision-making. Findings from the case study will be used to test some of the assumptions made by the Skeffington Report and the writers Darke, Irvin and Stansbury, and Treby.

3 STUDY AREA

3.1 Site Selection and Location

Slapton Line was chosen as a case study of public participation in decision-making. The decision to be made relates to the future of a coastal road that has a history of being flooded and eroded by the sea. Coastal flooding and erosion caused by sea-level rise is becoming an issue of relevance in many parts of the United Kingdom. Lessons drawn from this case study may be applied to situations elsewhere in the United Kingdom.

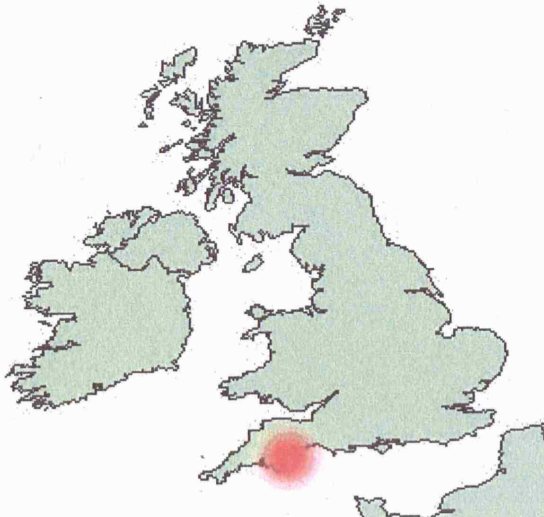
The case study was chosen for a number of reasons. The researcher wanted to choose a study where a decision-making process was taking place at the same time as the paper was being written. It was envisaged that as the area of research dealt with current issues that directly impact a large number of people in a relatively small area, a high level of interest from the local community would be achieved. People living in the local area would have strong opinions and would want to voice them. Indeed, the researcher has first hand knowledge that in the last few years some of the local residents and businesses have voiced their opinions forcefully through public meetings, the press and in everyday conversations.

The size of the immediate community involved and the number of key stakeholders was appropriate for the purposes of this study given time and funding constraints. The researcher is based within 1 mile of the stretch of road that has suffered from erosion and flooding. In terms of distance travelled and time taken commuting, the study site was convenient for the collection of primary data. This allowed the researcher the maximum amount of time possible in the production of this paper.

The case study is appropriate in that there are a number of key stakeholders involved in decision-making on the Line as well as the local community. The implications of the decision on the road will spread to a much wider geographical area than the immediate villages.

3.2 Site Description

Plate 1. England and location of Slapton Ley



The study area is situated within the county of Devon in southwest England (Plate 1).

Taken from Slapton Ley National Nature Reserve Website

Plate 2. Map showing location of Slapton within the South Hams

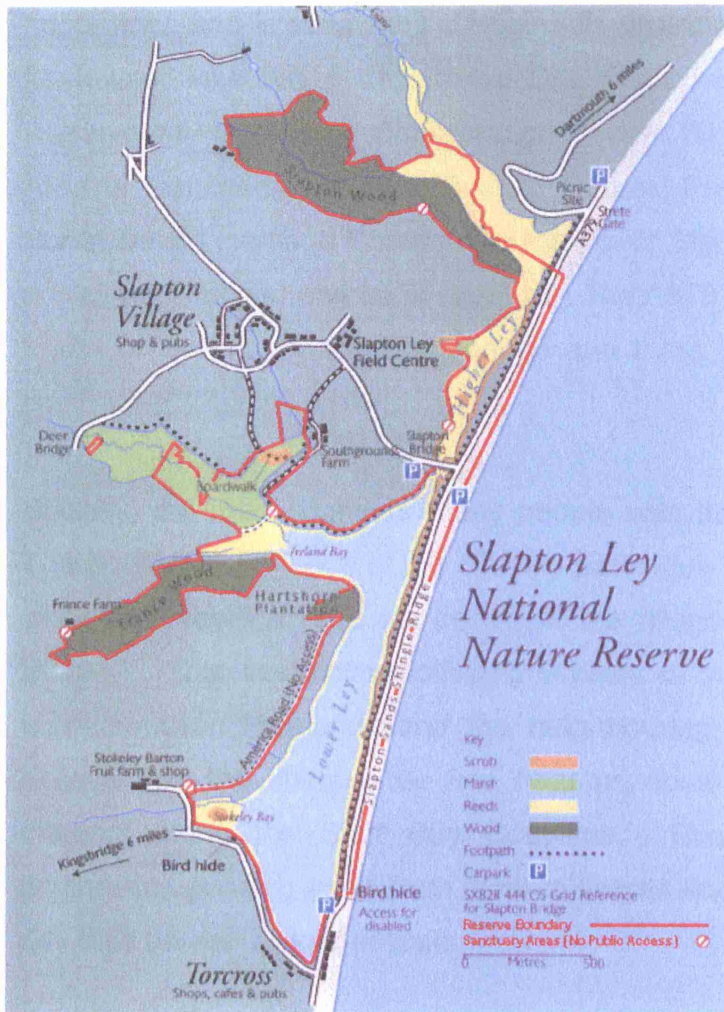
The villages of Slapton, Torcross and Strete are situated on the east coast of south Devon. This area between Plymouth and Torquay, is called The South Hams (Plate 2).



Taken from www.field-studies-council.org

Torcross lies directly adjacent to the sea whilst Strete and Slapton lie slightly inland (Plate 3). The village of Torcross lies at the southern end of Slapton Line. The northern end of the bar is known as Strete Gate. An A road, the A379, runs across the shingle bar and connects Torcross with the villages of Slapton and Strete. The village of Strete lies 2 miles to the north of Strete Gate.

Plate 3. Map showing Slapton Line, Torcross and Slapton



Taken from Slapton Ley National Nature Reserve Website

Slapton Line is the name of the shingle bar that runs between Torcross and Strete Gate. The bar separates a large freshwater lake (Slapton Ley) from the sea.

Plate 4. View of Slapton Line taken above the village of Torcross

Taken from Scott Wilson (2004)

Plate 4 shows a view of Slapton Line from Torcross looking towards Strete Gate. Slapton Ley can be seen on the left of the photograph with the sea on the right. The A379 runs over the whole length of the shingle bar.



3.3 Importance of the Shingle Bar

The shingle bar is a natural geomorphological feature that is of significant environmental importance and is constantly changing its profile and plan forms. The shingle ridge and freshwater lake are a designated Site of Special Scientific Interest, National Nature Reserve and Geological Conservation Review Site. The site lies within the South Devon Area of Outstanding Natural Beauty, Coastal Preservation Area and forms part of the South Devon Heritage Coast. The road over Slapton Sands is also important locally for social, political and economic reasons. The A379 connects a number of villages with the towns of Dartmouth and Kingsbridge and there has been a road across Slapton Line since 1862 (Mercer, 1968).

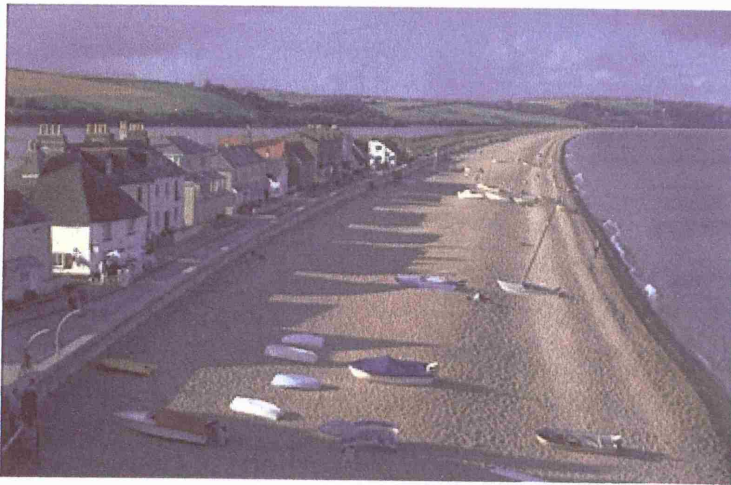
Socially, the road connects many people with their friends, jobs, work and education. The political importance of the A379 is partly due to previous human activity of dredging along the coastline. The sea destroyed the village of North Hallsands, south of Torcross, in 1917. This destruction followed 6 years of dredging shingle from below low water mark between Hallsands and the neighbouring village of Beesands. Locally, some believe that the shingle bar has become unstable due to the previous dredging of material along the Start Bay Coastline. Economically, Slapton Line gives local businesses passing trade from local residents and holidaymakers who visit the area for day trips as well as longer visits.

The shingle ridge is situated along a stretch of coastline that is highly dynamic. The ridge, due to sea level rise and storms, is naturally retreating landwards. Geomorphologically based estimates for long-term barrier retreat are 0.3m/year (Scott Wilson Consultants, 2004). In the past the Environment Agency has carried out works of protection for the village of Torcross, which directly fronts the sea.

Part of the village of Torcross is shown in Plate 5. The houses face on to the sea view. The A379 is located behind the properties and separates them from Slapton Ley. A seawall, erected in 1979, can be seen protecting the row of properties from flooding. This seawall stops at the northern end of the village.

Plate 5. Photograph of Torcross looking towards Strete Gate

Taken from www.english-nature.org.uk



The permanence of the stretch of the A379 along the shingle bar is now being questioned as a result of an increased frequency of high intensity storm events, combined with high tides that have led to the road being damaged.

In the winter of 2000/2001, an easterly storm combined with high Spring tides, up to five metres of beachhead along approximately 1000 metres of beach was eroded (Slapton Line Partnership website). Storm damage to the ridge resulted in a 200-metre section of the A379 being undermined in January 2001 and the road across the Line being closed. As a temporary measure a single carriageway along the damaged section of road was opened 3 months later. A new section of road (over 200m) was opened in February 2002. The new section of road lies 25m inland from the old position of the road.

3.4 The Slapton Line Partnership

The Slapton Line Partnership is made up of the bodies that have a responsibility for the elements involved on the Slapton Line (Slapton Line Partnership website). The Partnership was formed following the January 2001 storm. The group consists of Devon County Council, South Hams District Council, and English Nature with input from the Department for the Environment, Food and Rural Affairs (DEFRA), the Environment Agency, the Whitley Wildlife Trust, and Slapton Ley Field Centre (Table 5).

DEFRA maintains the overall policy responsibility for coastal and flood defences whilst operational responsibility rests with the Environment Agency, Local Authorities and the Internal Drainage Boards. Local authorities and the Environment Agency hold permissive powers to provide coastal defences whilst there is no legal duty on them to provide them.

The Slapton Line Partnership website states “the Partnership has been formed to decide how best to deal with the potential future erosion of the Slapton Line and its effect on the road, the environment, and the community.”

Table 5. Key stakeholders in the Slapton Line Partnership and their responsibilities

Stakeholder Name	Who Are They?
English Nature	Government’s statutory advisor on nature conservation and a consultee in relation to works affecting Slapton Ley SSSI and National Nature Reserve.
Devon County Council	Strategic Planning Authority, the planning authority for applications involving highways, responsibility for A379, statutory consultee for coast defence works, powers and duties under the Highways Act to maintain and protect the highway, discretionary power to undertake coast defence works, functions covering education, community services, environment, economic and social well-being.
South Hams District Council	Responsible for the beach and coastal erosion, responsible for promoting economic and social well-being, manages car parks, maritime authority with discretionary powers to undertake coast defence works.
Whitley Wildlife Trust	Landowner of most of beach and nature reserve, registered charity with education and conservation objectives.
Slapton Ley Field Centre	A registered charity with conservation and education objectives. Leases the land from Whitley Wildlife Conservation Trust and manages the nature reserve and field centre at the Ley.
Environment Agency	Discretionary powers for tidal flood prevention and has a supervisory duty with respect to works.
DEFRA	Government department with policy responsibility for coast defence. Discretionary power to grant aid coast protection works through district councils.

Information taken from Slapton Line Partnership website

4 METHODS

4.1 Literature Review

1. A literature review on methods of public consultation and participation in decision-making will be undertaken. Books, journals, newspaper articles and the Internet will be used to find relevant material. The concepts of public consultation and participation will be explored in relation to democracy, sustainability and coastal management.
2. A literature review on climatic change with a focus sea-level rise in Britain will be undertaken.

4.2 Case Study

3. The future of the road on Slapton Line will be used as a case study of public consultation in decision-making. Slapton Line is chosen as the case study due to a number of reasons.
 - The decision to be made on the future of the road is directly related to coastal erosion and flooding which, as coastal management issues, have relevance to many parts of the country.
 - The location of the study site is convenient in relation to the base of the researcher, being only 1 mile from the researcher's home.
 - There are a number of key stakeholders involved in discussion about the future of Slapton Line including local residents, businesses, different levels of Government and groups with an environmental interest.
4. Newspaper articles regarding decision-making over the road on Slapton Line will be collated.
5. Key questions, with regard to participation in local decision-making, that arise from the literature will be identified.

4.3 Questionnaire

6. A draft questionnaire will be constructed with the aim of discovering how people have been involved in discussion about the road and how they would like to

participate in discussion about the road and the coastline. Questions will be posed in order to identify how effective public consultation has been in relation to deciding the future of the A379 between Torcross and Strete/Slapton. In addition, the residents will be asked which of the stakeholders they trust. A series of attitude statements will be given and people will be asked which they agree with. The statements that people choose will establish what local residents think about the future of the road now that most of the consultation work has been undertaken. The extent to which the local community holds sustainable views towards coastal management will be examined.

7. The draft questionnaire (Appendix 1) will be used as a pilot and given to ten friends and relatives for them to fill out and give their feedback on the content and structure. The purpose of a pilot survey includes; testing questionnaire wording, testing question sequencing, and testing questionnaire layout (Veal, 1997).
8. A draft questionnaire will be emailed to the Chief Executive of South Hams District Council, the principal engineer at South Hams District Council, and three academics based at University College London and University of East Anglia. A period of two weeks will be given for these consultees to offer their feedback.
9. Following feedback from the consultees and the pilot questionnaire, a revised questionnaire will be constructed (Appendix 2). A covering letter detailing the purpose of the questionnaire will be written (Appendix 3). It will be made clear that the survey is for academic purposes and the researcher is not representing any organisation. Attention will be paid to ordering the questions in the questionnaire to ensure that people find the first few questions interesting and easy to answer. Supporting information to the questionnaire will be provided on the reverse side of the covering letter (Appendix 4).
10. A questionnaire dispatch team will be recruited and briefed on the purpose and content of the questionnaire.
11. On 3rd July 2005 the questionnaire will be distributed to 300 parishioners in Slapton, Strete and Torcross (65 to Torcross, 50 to Strete with the remainder to Slapton). A response rate of 20% or 60 questionnaires is anticipated. Veal (1997) states that it is the absolute size of the sample that is important, not its size relative to the population. A sample size should be determined on the required level of precision in the results, the level of detail in the proposed analysis and the available budget. 300 questionnaires are thought to be the maximum number

possible to be able to print, deliver and analyse in terms of time and funds available.

12. Five people, local to the area, will hand deliver the questionnaires. Anyone known to the distributors as having their main residence in one of the three villages will be targeted. The dispatch team will be advised to give questionnaires to any property that appears to be occupied regardless of whether the researcher knows the residents or not. This is to ensure that the sample of the population given questionnaires is random in order to minimise bias in the sample. Houses where the residents are visible or where there are signs that the property is occupied (such as parked cars, washing hung out to dry etc) will be given questionnaires. If the residents meet the distributor face-to-face, he/she will explain the origin and purpose of the questionnaire. The population is taken to mean the permanent residents of the local community and does not include second homeowners. Second homeowners will be excluded from the sample due to the lower expected response rate that will be achieved if empty homes are sent a questionnaire.
13. Veal (1997) states that “the respondents to a mail survey form a sample, but is not randomly selected but self-selected.” This introduces sources of bias in the sample of the population due to an unknown and uncorrectable element of bias caused by non-response. There is little that can be done about this except to make every effort to achieve a high response rate.
14. The questionnaire will include a stamped addressed envelope. The home address of the researcher will be used as this shows those targeted that the researcher is local and does not implicate the District Council (the place of work of the researcher) with the survey.
15. The answers to the questionnaire will be numerically coded before being entered on to a computer.

4.4 Analysis of Data

16. The questionnaire data will be collated using SPSS (Statistical Package for Social Scientists).
17. Comments written on the questionnaire, including people's thoughts on the future of the road and their vision for the coastline, will be entered into Microsoft Excel.

Trends in the answers, which people give, will be identified using numerical coding. Interesting ideas from the residents will be quoted within the main body of the text.

18. Appropriate tables and graphs will be produced in order to present the results of the questionnaire in a clear manner.
19. Through interpretation of the graphs conclusions will be drawn from the data. It will be important to assess the validity of the questionnaire-based data, the extent to which the results reflect what they are meant to reflect.
20. Findings from the case study will be related back to the original questions arising from the literature review and broad conclusions from the research will be drawn.

5 RESULTS

5.1 Response Rate

Of the 300 questionnaires that were sent out 145 (48%) were returned by the 17th July 2005. Due to the limited time available for the researcher to analyse results, only those questionnaires received by 17th July are used in this section. By 30th July 177 questionnaires had been returned, 59% of the number given out. The response rate has been extremely high for a postal survey. The reasons for the high response rate may have been a combination of the following factors:

- The topic chosen is relevant to the sample population and the topic evokes strong emotion. 97% of the people surveyed said that Slapton Line was important to them.
- The survey itself was written in plain English, was easy to understand and posed a number of relevant and interesting questions.
- The questionnaire was hand delivered by five people who are local to the area and made considerable effort to engage the residents in conversation, explaining the purpose of the questionnaire survey.
- A covering letter explained the purpose of the survey and requested the help of the local residents.
- The address to return the questionnaire was local.
- The questionnaire had a stamped self-addressed envelope.
- The survey was undertaken in a period a sunny weather.

The survey covered the villages of Strete, Slapton and Torcross, which are villages with a relatively small resident population (according to the Devon County Council website

Slapton Parish comprises 178 households). In this results section actual numbers of respondents are specified in the tables and in some graphs in order to emphasise the results. Population is taken to mean the total number of residents in Slapton, Strete and Torcross.

5.1.1 Statistical Note

All sample surveys are subject to a margin of statistical error. The margins of error, or ‘confidence intervals’ for this survey have been calculated at the 95% confidence level and are as follows:

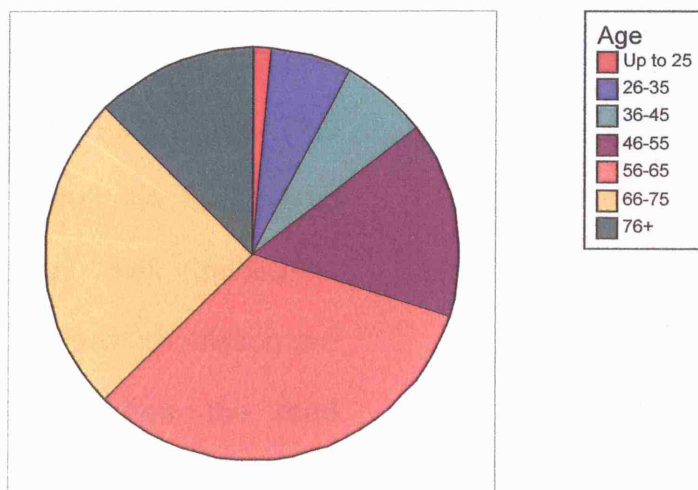
Table 6. Confidence Intervals for the Survey

Finding from the survey	95% confidence interval
50%	+/- 8.3%
40/60%	+/- 8.2%
30/70%	+/- 7.6%
20/80%	+/- 6.7%
10/90%	+/- 5.0%
5/95%	+/- 3.6%

This means, for example, that if 20% of the sample is found to have a particular characteristic, there is an estimated 95% chance that the true population percentage lies in the range 20 +/- 6.7 i.e. between 13.3% and 26.7%. These margins of error have been taken into account in the analyses in this paper. The calculation for the margins of error is in Appendix 5.

5.2 Social Characteristics of the Sample Survey

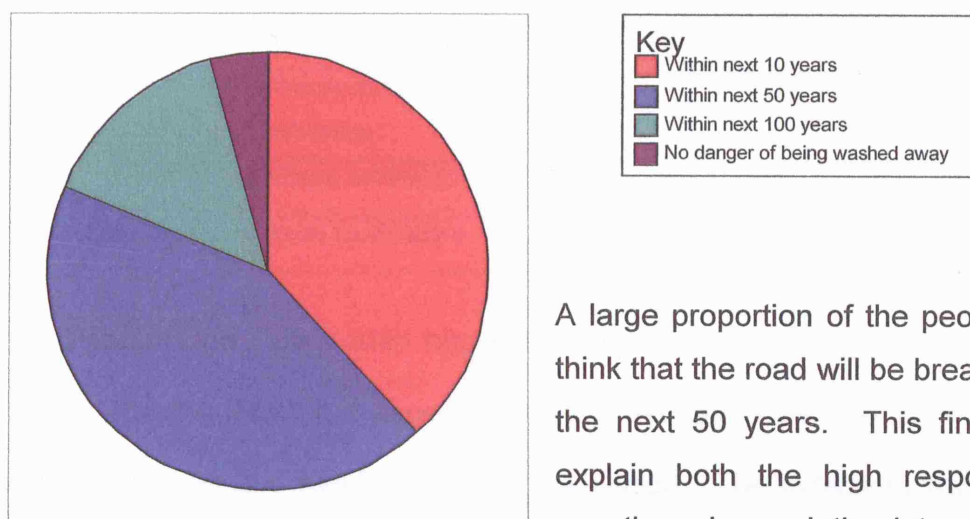
Figure 4. Age distribution



The majority of people who returned the questionnaire were aged between 56 and 75. 51% of the people surveyed are retired, 46% are employed, and only 3% are a housewife or househusband.

5.3 Perception of Risk

Figure 5. People's thoughts on longevity of the road



A large proportion of the people (81% +/- 7%) think that the road will be breached again within the next 50 years. This finding may in part explain both the high response rate to the questionnaire and the interest the population

show in the road issue. The majority of the population think that the road is at risk from flooding / erosion within their lifetime or the lifetime of the next generation. The threat of coastal flooding and erosion is perceived as being imminent.

5.4 Awareness of the Slapton Line Partnership

Figure 6. Awareness of Slapton Line Partnership

86% (+/- 6%) of the population are already aware of the Slapton Line Partnership. This suggests that the Partnership has been well publicised and/or the local population are interested in how the road issue is being dealt with.

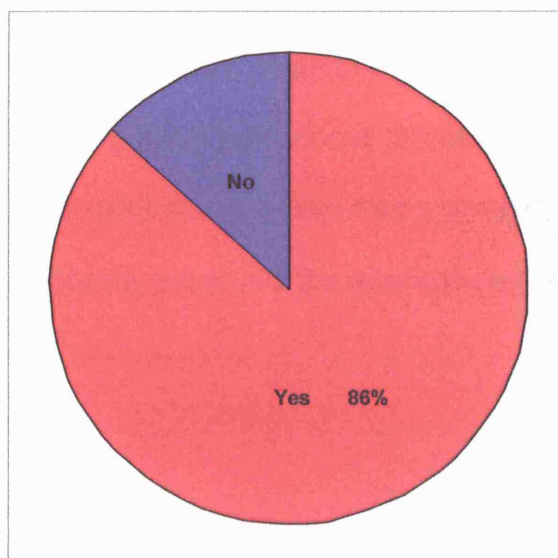


Table 7. Awareness and use of different consultation tools

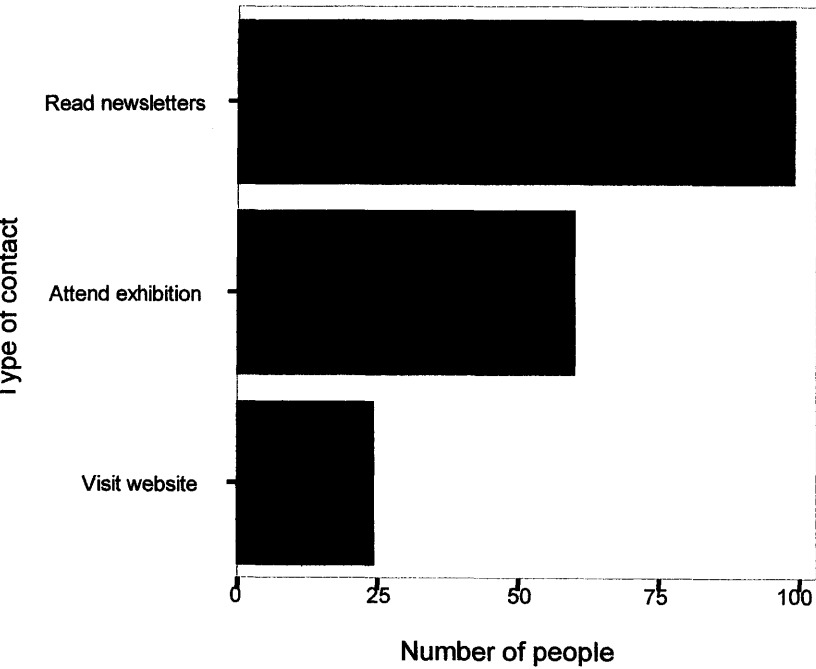
	Number of people	% of people
Awareness of website	69	48%
Visit website	24	17%
Awareness of exhibition	115	79%
Attend exhibition	60	41%
Read newsletters	99	68%

The Slapton Line Partnership has sought to keep people informed about progress in decision-making through a series of public meetings, a website, newsletters sent out to local businesses and residents and an exhibition. The exhibition was held in Torcross over a period of two days at which people were invited to view the consultants' interim

findings. Awareness of the Slapton Line website (48% +/- 8%) was significantly lower than awareness of the exhibition held in Torcross (79% +/- 7%).

Roughly half of the people aware of the exhibition actually attended the event. Yet the response rate from this questionnaire and the detail of peoples answers show that people are interested, want to be informed and participate about discussion on Slapton Line. From the respondents criticisms of the exhibition it seems that a greater number of days and a larger venue would have significantly improved the attendance and success of the event.

Figure 7. How people have been kept informed



Despite almost half the population being aware of the website, only 17% (+/- 6%) actually visited the website.

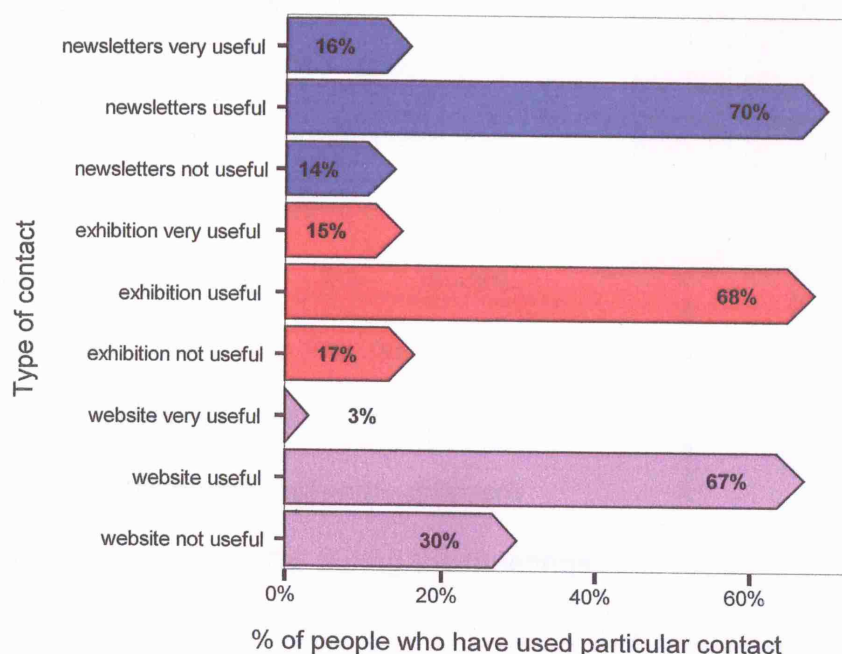
The majority of the population (68% +/- 12%) have read the Slapton Line newsletters.

The success of the newsletters may be due to:

- The study area having a high number of retired people with time to read letters.
- Those that responded to the questionnaire are likely to be the ones who will read newsletters.
- The flexibility for the recipient in choosing when to read the newsletter once it has arrived through the post.
- Contacting people in their home environments may create a feeling that people are personally involved in the study and their views are being specifically sought.
- Giving information to people rather than telling them where to go for information.

5.5 Effectiveness of Different Forms of Consultation

Figure 8. Value of different forms of communication



Of those people who used the website, attended the exhibition or read Slapton Line newsletters, the proportion of people who found each particular form of contact useful was very similar.

There is no significant difference between the value people found in the different forms of consultation. 70% (+/- 8%) of people who read newsletters found them useful compared to 68% (+/- 8%) finding the exhibition useful and 67% (+/- 8%) finding the website useful. It seems that once people became engaged in a form of consultation, the website, exhibition and newsletters were equally useful. The confidence intervals overlap, so it cannot be concluded that there is any 'significant' difference in the usefulness of the different forms of consultation.

5.6 Effectiveness of Public Meetings

Figure 9. Attendance at public meetings

59% (+/- 8%) of the population have attended public meetings concerning the future of the road. Nearly two thirds of the population found the meeting(s) useful whilst the remainder did not. One quarter of the people had an input into the meeting(s). Over two thirds of people claim that the meetings developed their understanding of the issues. However, a relatively low number of people (16% +/- 6%) thought that opinion differences between different people became smaller during the meetings.

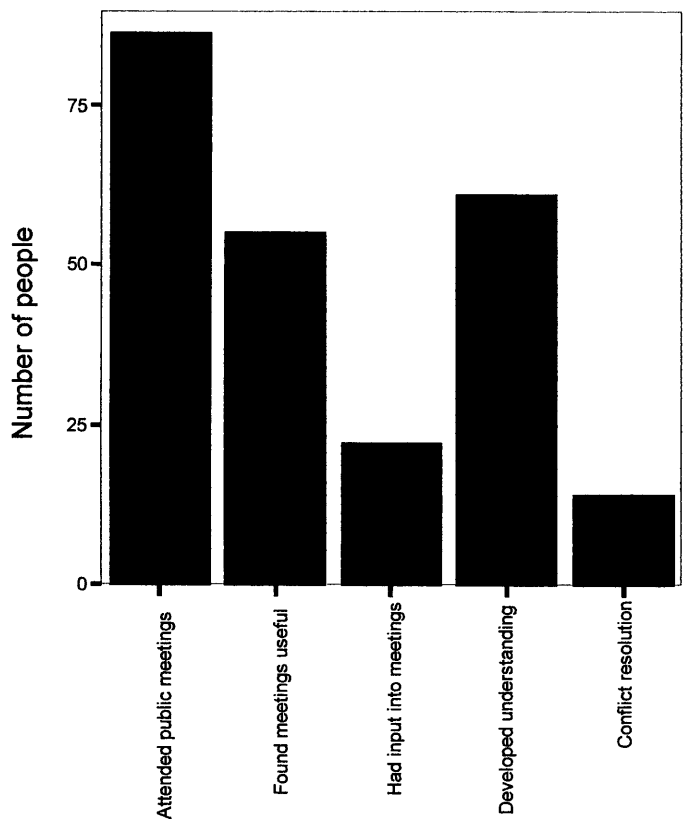
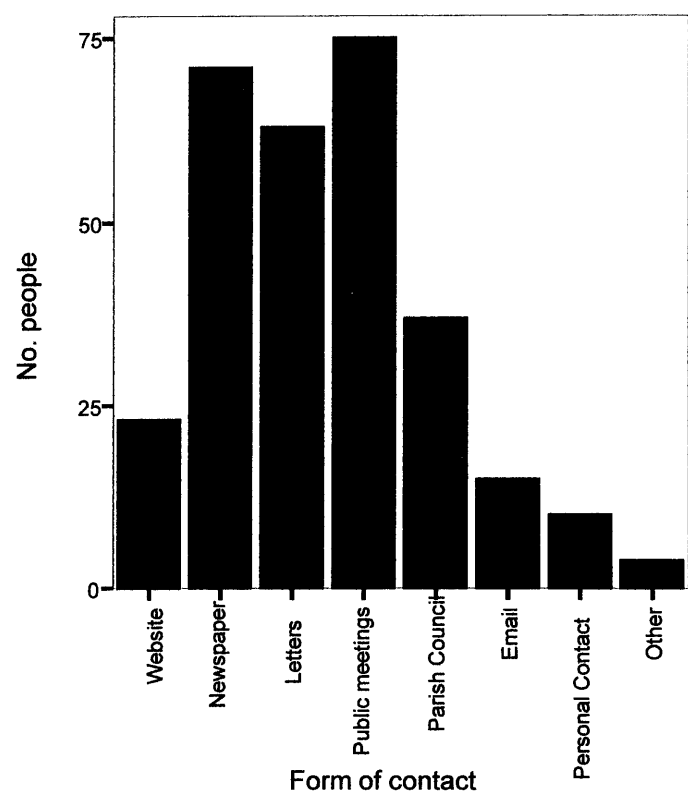


Figure 10. Bar chart to show how people want to be informed about Slapton Line



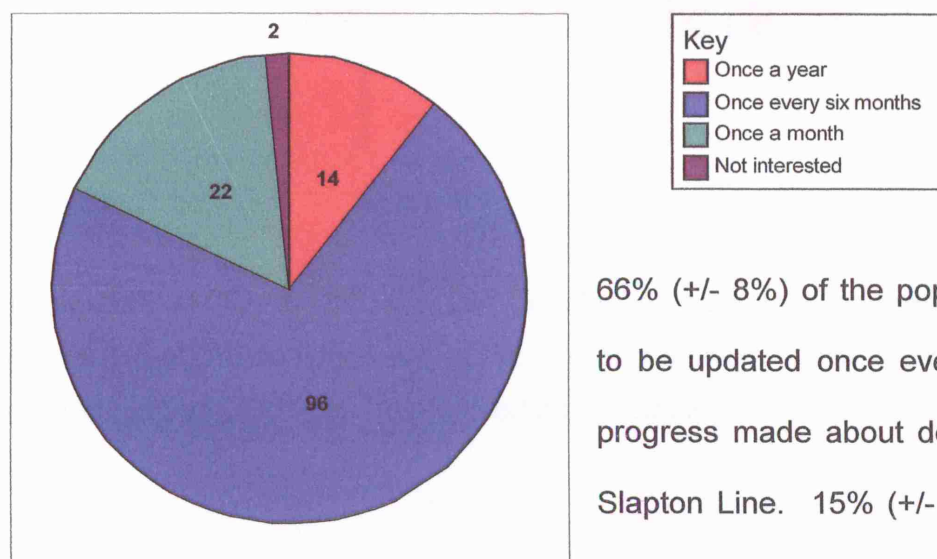
The most popular choices as to how people would like to be kept informed about discussion on Slapton Line are public meetings, newspaper articles and letters (Figure 10). Public meetings are the favoured form of information. Perhaps one of the reasons for this choice is that the public can come face-to-face with the key stakeholders. Additionally, individuals in a group are likely to feel less threatened than meeting the stakeholders individually. Parish Councils were favoured over website and email as a desired form of contact. Only ten people cited personal contact as one of their preferences.

Table 8. How people would like to be kept informed

	Number of people	% of people
Website	23	16%
Newspaper articles	71	49%
Letters	63	43%
Public meetings	75	52%
Parish Council	37	26%
Email	15	10%
Personal Contact	10	7%
Other	4	3%

Despite one quarter of people stating that the Parish Council would be an effective way of being informed about Slapton Line, only 11 people had attended more than two Parish Council meetings in the last year. 29 respondents (20%) said that they had attended at least one Parish Council meeting in the last 12 months. Of those people who did not attend any Parish Council meetings, 49 people said that they would be willing to attend regular meetings.

Figure 11. How often people want to be updated

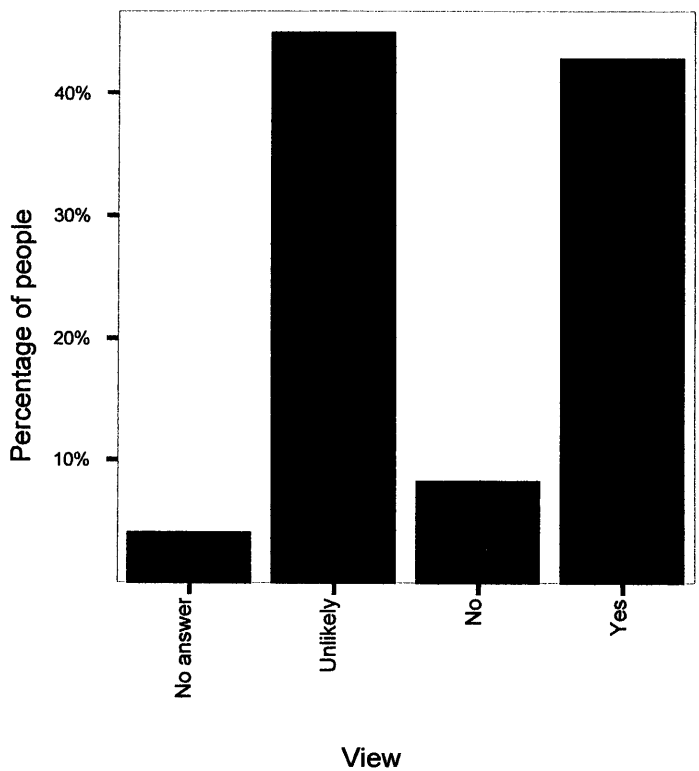


66% (+/- 8%) of the population would like to be updated once every six months on progress made about decision making on Slapton Line. 15% (+/- 6%) would like to be updated once a month. It appears that

most of the population appreciate that decision-making on Slapton Line will be a time-consuming process and will accept that updates may be on as infrequent a basis as twice yearly.

5.7 Perceptions on Collaborative Decision-Making and Public Participation

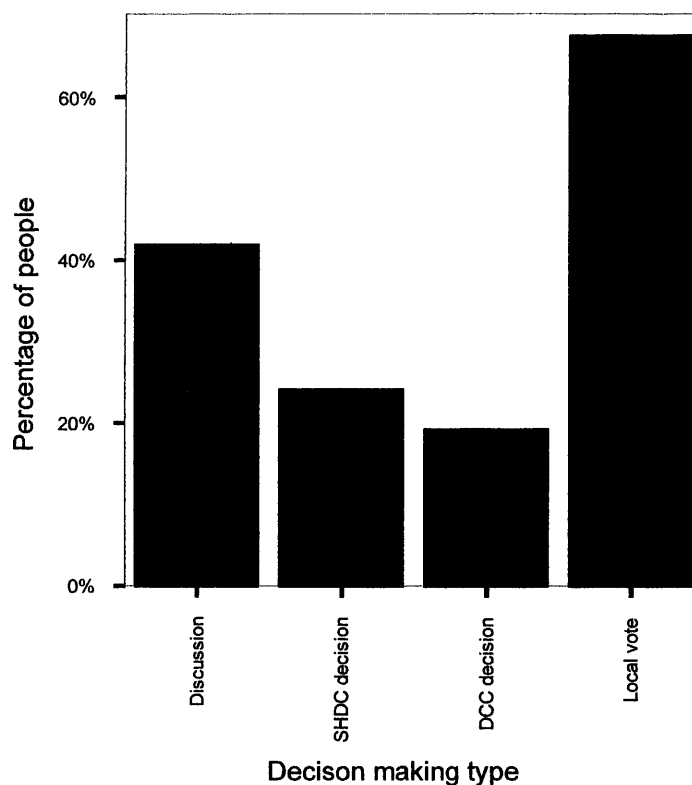
Figure 12. Do people think that competing interests can be resolved satisfactorily?



Roughly half (45% +/- 8%) of the population think that competing interests over management of the coastline are unlikely to be resolved. 43% (+/- 8%) of people think that competing interests can be resolved satisfactorily.

Figure 13. How people think a satisfactory outcome can be achieved

The majority of people (68% +/- 8%) think that a local vote would result in a satisfactory outcome. Discussion at public meetings is favoured over a District or County Council decision.



Whilst people focus on their own individual needs rather than viewing decisions taken on parts of the coast as impacting the coastline as a whole, a local vote on the future of the road may not be appropriate method of decision-making in that the result is likely to be environmentally and economically unsustainable. Those in power need to engage residents in discussion about why a local vote would not be feasible.

Table 9. Are the various agencies working well together?

	Number of people	Percentage of people
Yes	27	19%
No	60	41%
Don't know	26	18%

Only 19% (+/- 7%) of people think that the various interested groups have been working well together in the decision making process. Twice as many people think that the various agencies have not been working well together. The Slapton Line Partnership is not viewed as a cohesive body; stakeholders are perceived as having separate agendas and not working towards a common goal.

Figure 14. Confidence that individuals' views will be considered

People generally have no or little confidence that their views when asked by the consultants will be taken into account. Only 12 people were confident that their views would be fully considered. Perhaps they would be more confident if there was ongoing dialogue between the consultants, stakeholders and the community so that how their views would be taken into account could be understood.

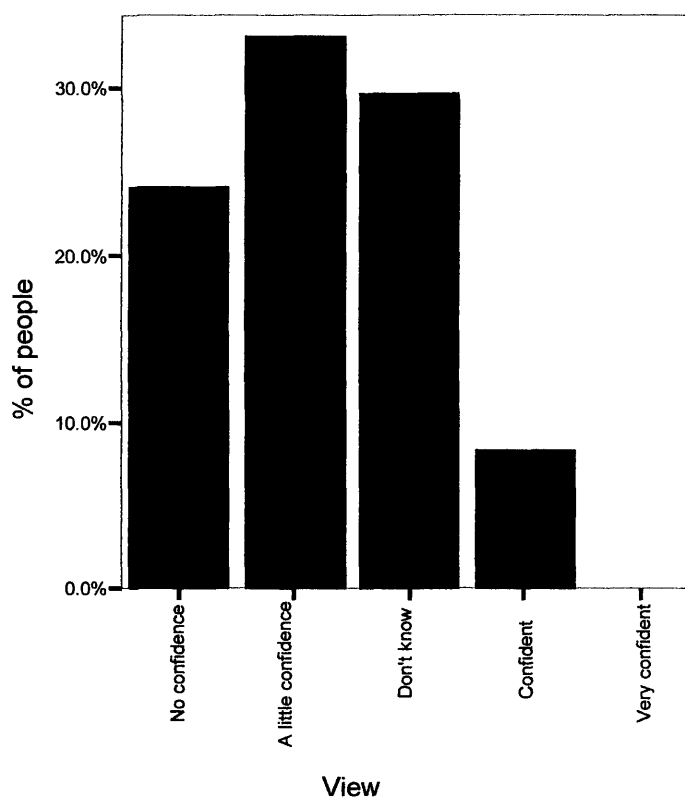


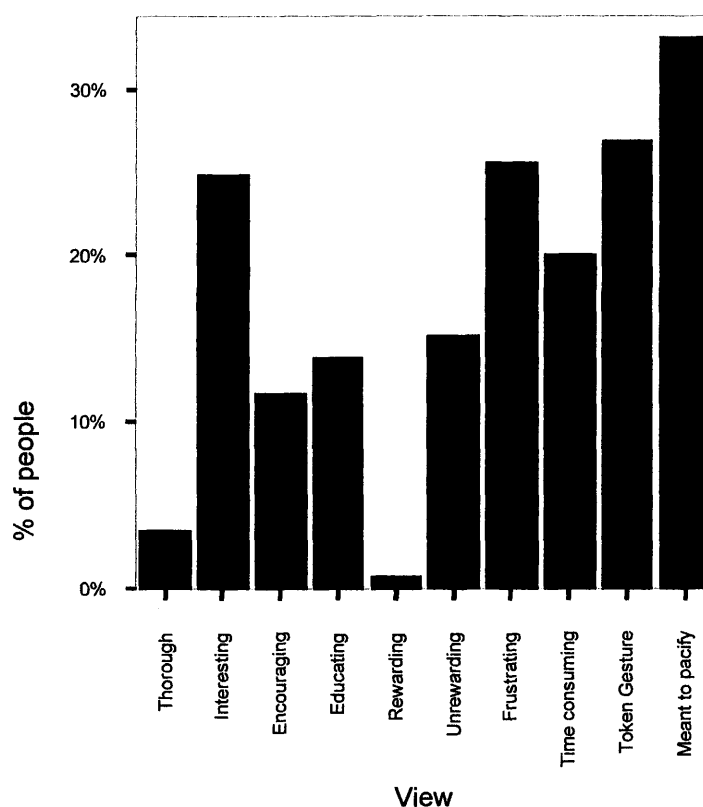
Table 10. How did people describe consultation methods

When asked how residents had found the consultation methods used the most popular answers were; meant to pacify, token gesture and frustrating. One quarter of people thought the consultation exercise was interesting. Only one person found the experience rewarding.

	Number of people	% of people
Thorough	5	3%
Interesting	36	25%
Encouraging	17	12%
Educating	20	14%
Rewarding	1	1%
Unrewarding	22	15%
Frustrating	37	26%
Time consuming	29	20%
Token Gesture	39	27%
Meant to pacify	48	33%

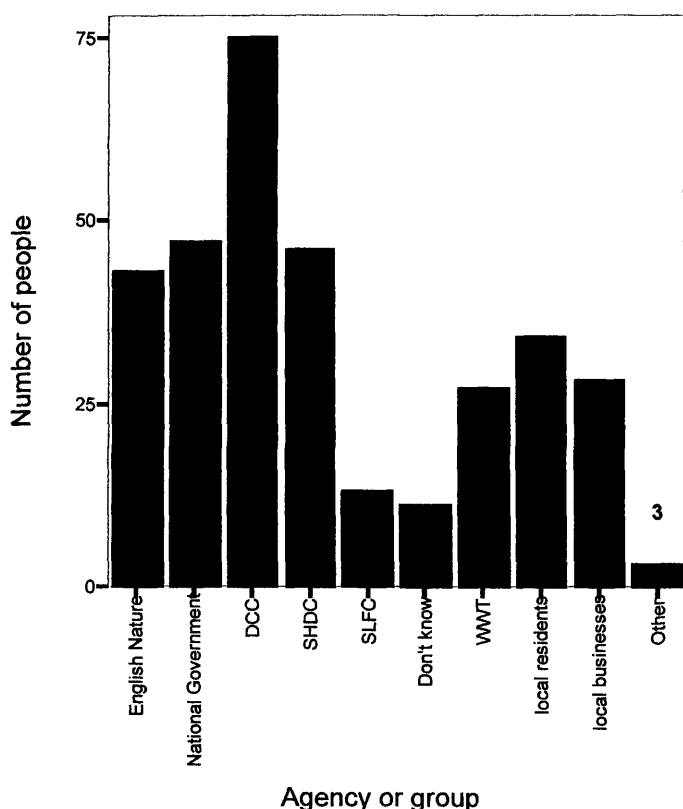
Figure 15. Views on consultation methods

Ongoing dialogue with the community throughout the consultation process could establish how consultation methods could be improved. In a decision-making process that is in the timescale of years, methods of consultation should be adapted to the needs of the population in order to ensure consultation is a positive experience for those involved.



5.8 Perceptions on the Different Stakeholders

Figure 16. Who do people think will make the final decision?



When asked who would make the final decision on Slapton Line, the most popular answer was Devon County Council, followed by National Government, South Hams District Council and English Nature. There is no clear view on who will make the final decision regarding the road, although some members of Slapton Line Partnership are clearly perceived

as holding more power than others. In order for the decision-making process to be transparent, the local community should be advised who has responsibility for making the final decision.

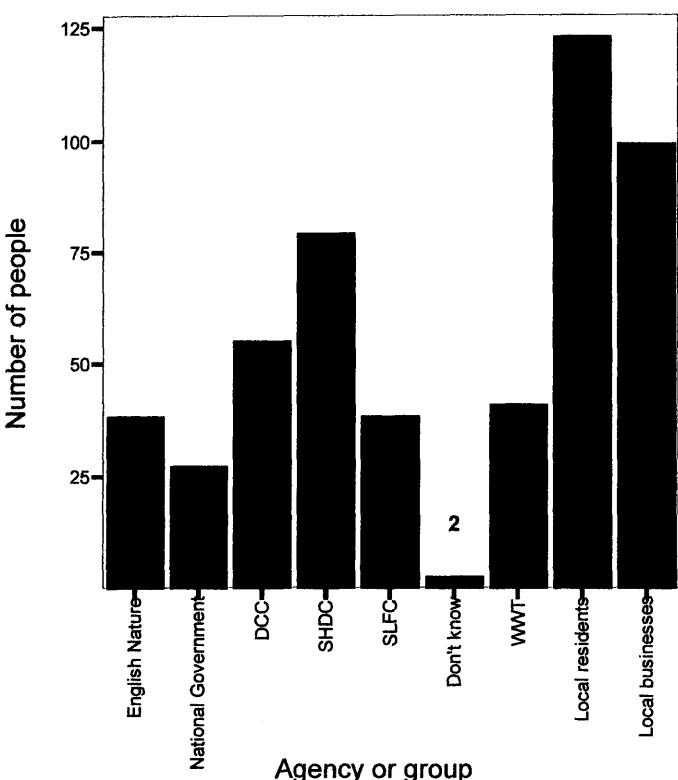


Figure 17. Which bodies people think should influence the decision on Slapton Line

The order of preference (in terms of numbers) for which body people think should influence the decision on Slapton Line is; local residents, local businesses, South Hams District Council, Devon County Council, Whitley Wildlife Trust, English Nature, Slapton Ley Field Centre and National Government.

The fact that local residents and local businesses were chosen as key people to influence the decision on Slapton Line shows a desire by the local community to be involved in local decision-making. Many stated that they wanted to be involved in the decision-making of local issues (59% +/- 8%) and to participate in a study with the aim of creating a common vision for the future of the Start Bay Coastline (61% +/- 8%).

99 people thought that local businesses should influence the decision on the road. It seems that there is confidence that the local business community will reflect the views and interests of local residents. More than half the population think that South Hams District Council should influence the decision on Slapton Line. It seems that the District Council is perceived as a body that also represents the interests of the local community.

Figure 18. Which bodies do people think wants discussion with the local population

Many people think that local businesses, as well as South Hams District Council, want discussion with the local population.

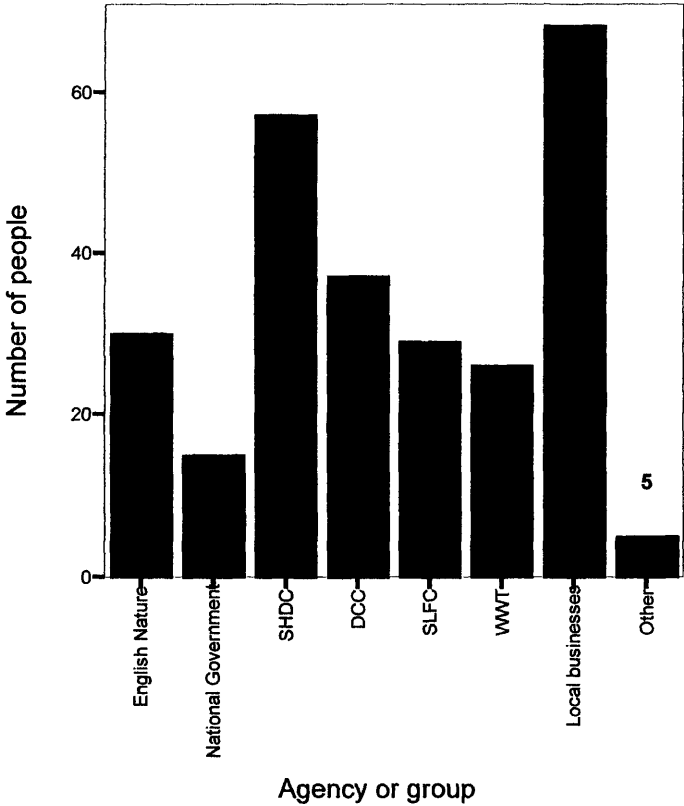
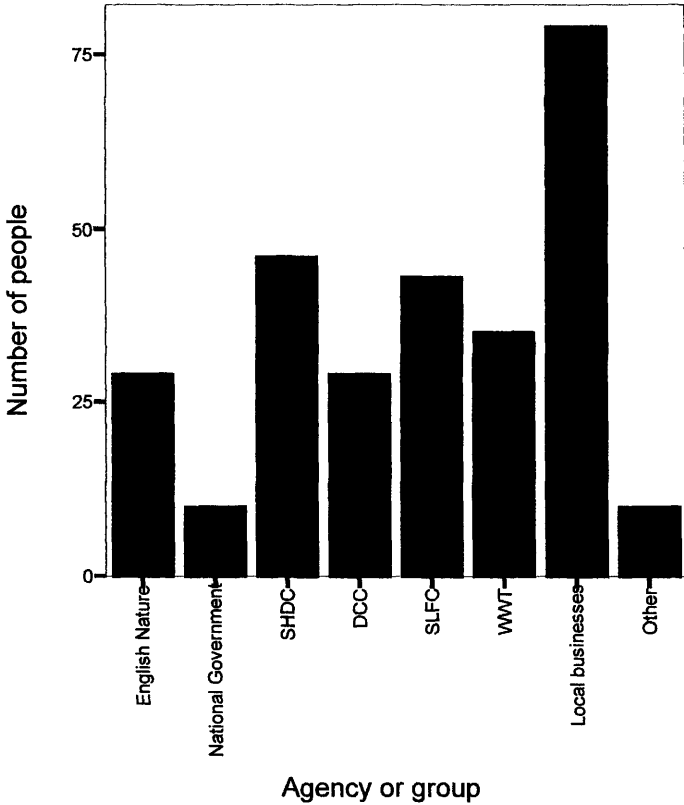


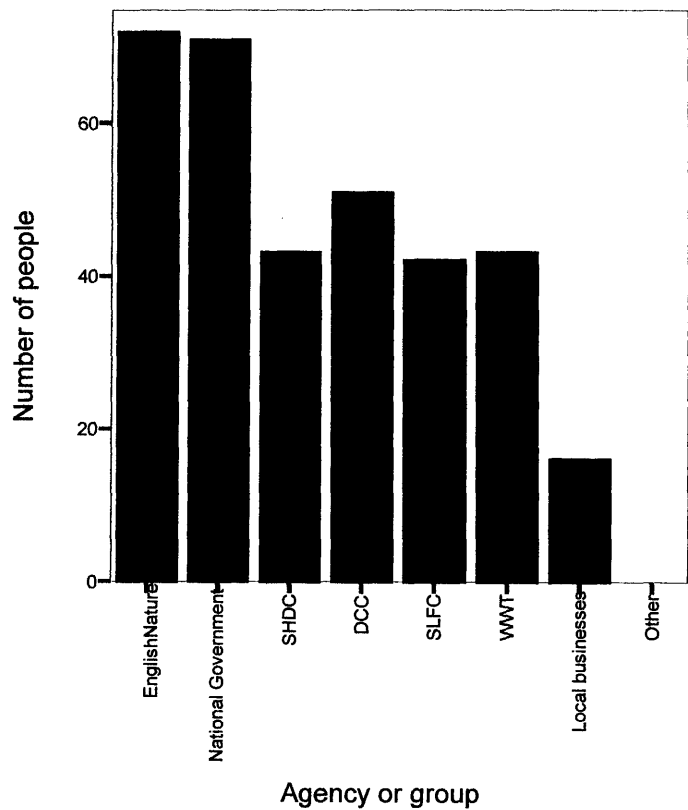
Figure 19. Who people trust

There are strong similarities between who people think want discussion with the local population and who the local population trusts. The following list shows the order in which people trust the different groups; local businesses, South Hams District Council, Slapton Ley



Field Centre, Whitley Wildlife Trust, Devon County Council, English Nature and National Government. Perhaps the fact that South Hams District Council covers a much wider geographical area than Torcross, Strete and Slapton and has its offices in Totnes, 12 miles from Slapton, means that the District Council is less trusted than local business people. Whilst called a “partnership,” results show that people trust members of Slapton Line Partnership to differing degrees.

Figure 20. Groups that are not trusted



The only body with a low number of people stating that they did not trust them were local businesses. The groups that stood out as not being trusted were English Nature and National Government.

5.9 Views on the Road

Figure 21. Views on management of the road



Only one quarter of the population (+/- 7%) think there should be a limit on the amount of money spent on protecting the road in its present position. 41% (+/- 8%) think the road should be protected in its present position whatever the economic cost. Despite this relatively high figure, only 21% (+/- 7%) would support local funding of the road and 26% (+/- 7%) would support a County Council tax increase.

More than half the population (63% +/- 8%) think that management on this coastal stretch should be flexible. One quarter of the population think that a decision should be taken now and not changed. Opinion is split roughly equally as to which is more important; local businesses and residents or the bigger picture (i.e. changes along the whole coastline).

5.10 Views on the Future of the Road and the Coastline

In the final section of the questionnaire people were asked, "what do you see as the future for the coastline between Strete Gate and Torcross?" The following quotations are some of the comments that were received. A full account of the comments is attached in Appendix 6. The quotations have been chosen to show some of the different viewpoints that exist.

'In the short to middle term it will (remain) all with minimum money spent on it whilst a myriad of communities all spend years researching the problem at enormous expense and arriving at answers which to residents of standing have been blindingly obvious right from the start.'

'At the moment I have no confidence that the Slapton Line road will be maintained over the next 50 years. All authorities seem to be prepared to invest minimum funds in makeshift, short to medium term solutions. I believe a much more radical approach is necessary.'

'English Nature and the Whitley Trust have an agenda that puts their "scientific views" above the interests of local residents, businesses and visitors.'

'Pretty bleak as English Nature hold the only brief from Government with any clout, but English Nature's view of the future is of one devoid of human occupation, influence or benefaction.'

'There will be a ridge of shingle there in 50 years but if English Nature have their way no road. P.S. lived here since 1940.'

'A complex inter-relation between time, natural processes, money. Depends on abilities of all parties to remain flexible in their responses to these complexities as they are revealed. The road should be realigned (or shingle barriers supplemented) as long as financially and environmentally possible.'

'If there is another breach of road, let local folk with Devon County Council sort it out with local contractors who have the best knowledge. Sack all the advisors and consultants and put money to the road.'

'If nothing is done to maintain and keep the road the whole area of the South Hams will go into social and economic decline.'

'I do hope it can be kept open - it is vital for those who use the village shops and post office, for those who use the Chillington medical practice and for those of us who are churchgoers - we are closely linked with Stokenham church with contacts between clergy and readers and the parishioners. My butcher serves meat to our village and needs our trade.'

'A sea-defence system to be put in place to maintain the road. Not just for locals, but it is helpful for the tourism industry. People come to see the Ley and the sea and the road between. It is unique.'

'The coastline should be allowed to revert to natural habitat. There are precious few sites remaining of the type between Strete and Torcross, it is an Area of Outstanding Natural Beauty. Slapton, Torcross and Strete are served by other roads which could be upgraded.'

'I believe that the Government will back English Nature in their "bid" to allow nature to take its course. With local and central government not wanting to spend out on coastal defences they will compensate those few businesses that are in Torcross and go back to their offices and nice houses in London and the city. The present Government has already shown that the bigger picture does matter to them - but at the expense of the finer details i.e. communities and small businesses.'

'Gradual decline in road condition as it is moved back in the face of marine erosion. The position will eventually become untenable and road abandoned. Area becomes saline/intertidal with shingle banks forming and disappearing according to wave conditions. Attains a form of equilibrium relative to wave height/frequency.'

'In my opinion the future of the coastline between Strete Gate and Torcross is not very promising because the actual policy of Westminster is "wait and see" rather than taking preventive actions to avoid further catastrophes and as usual people and business are coming very low on the priorities list. It is regrettable but that is the case.'

'I am optimistic that the road will not be washed away. Should it disappear I would wish its replacement to remain in its present position for the benefit of the community and its commerce if this could be achieved with minimum loss to the natural environment.'

'When the road goes I see a fantastic opportunity for a natural environment without vehicles, a haven for wildlife and green tourism. Local residents would have to adapt to the changing conditions.'

The comments regarding the future of the road and coastline were grouped into categories of similar answers. Whilst only 5 people referred specifically to global warming in their comments, 21 of the respondents stated that there are no long-term protective measures against coastal erosion and flooding. 29 people said that the road should be maintained, a further 7 said that the road should be maintained whatever the economic cost. 8 people suggested that hard defences could be used to protect the coastline. 18 people said that they wanted the stretch of coastline to remain as it is now.

Four and a half years after the temporary closure of the road, a large proportion of local residents are of the opinion that the road should be retained in its present position whatever the economic cost. Yet the literature review on sea-level rise around the UK has shown that a coastal management approach of 'holding the line' in all situations will be unsustainable in the long-term.

6 DISCUSSION

6.1 Participation in the Decision-Making Process

This piece of research provides evidence that people do want to be involved in decision-making exercises that impact their lives. The coastal community in the Slapton Line case study have shown that they want engaged citizenry rather than passive citizenry. A large proportion of the local community expressed an interest in being involved in creating a common vision for the future of their coastline.

In the case study, decision-makers used a series of methods to consult the public on the future of the road. A website, newsletters, an exhibition and public meetings were utilised with varying degrees of success. On both Arnstein's ladder of participation and Treby's wheel of participation (Figure 22), the level of consultation has been reached.

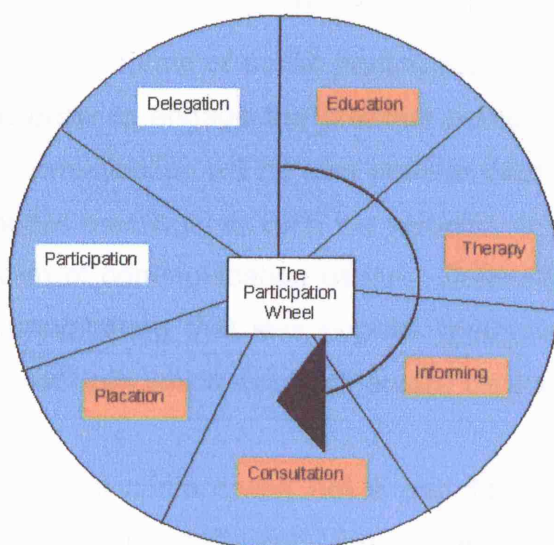


Figure 22. Level of Participation Reached in Slapton Line Consultation Process

A distinction needs to be drawn between consultation, where communication of information is generally one-way, and participation, where stakeholders are engaged in dialogue. Despite much effort to consult the local communities on Slapton Line, this paper indicates that local residents and business owners

have not been given the means to participate and share in the decision-making process.

The majority of the population have little or no confidence that the decision-makers will listen to their voice and there is a large degree of scepticism that competing interests can be resolved satisfactorily. The study highlights the need for higher levels of interaction between residents of the coast and decision-makers in order to reach socially acceptable approaches to coastline management. Coastal communities that will be affected

economically, socially or environmentally through climate change must be allowed to participate in decisions on their coastline.

In ideal circumstances for public participation all stakeholders need to be involved from the start of the decision-making process. However, results from the Slapton Line study suggest that, even four years from the road being temporarily closed, it would not be too late to engage stakeholders and the public effectively in participation. The fact that many people were willing to respond to a questionnaire survey shows that people want to be involved and participate in decision-making.

Monitoring the effectiveness of consultation methods throughout the decision-making process, and questioning why some forms are more popular than others, would enable improvements to be achieved during the course of consultation.

6.2 Different Forms of Public Involvement

Different forms of public participation are required for any one decision-making exercise in order to engage the greatest number of interested people possible. Some forms of communication will be less popular than others. In the case study, people who attended public meetings, or used the website, or read newsletters, in the main found their chosen form of communication useful. Consultation tools need to be chosen with care whilst remembering that less popular methods may be key to reaching certain sectors of a community which would otherwise be excluded.

Personal contact was not a popular choice in how people stated they wanted to be informed about Slapton Line. However, it could be argued that within small rural villages, such as Slapton, Strete and Torcross, personal contact is a strong form of communication. Everyday conversations between residents and business owners take place, enabling ideas to be discussed and spread throughout the community.

High quality public involvement in decision-making requires ongoing dialogue between different interest groups beginning in the formative stages and carried out with a full range of stakeholders. Dialogue should be a two way process and the aim of any

participation process should be to move away from a unidirectional flow of discussion. To include all viewpoints is necessarily a deliberative process that cannot be rushed.

6.3 Best practice for Decision-Making Bodies

In the case study public meetings were popular amongst the local community despite recognition that the meetings could have been improved. It is evident that the power that participants hold within meetings is not equal. This may be due to a number of reasons including eloquence, or confidence, in public speaking, time and money available in presentation of viewpoints, and perceptions of who has the power to make the final decision. This paper suggests that facilitators are required to ensure that all parties have the opportunity to have their say and avoid public meetings being unfairly dominated by a minority. The role of the facilitator must be to enable different interest groups to voice their feelings effectively.

The case study has shown that information that is not backed up by deliberative discussion is insufficient to change perceptions of different interest groups. The population's views on management of the Slapton Line coastline are largely unsustainable. One possible reason is that environmental interests have been inadequately represented in debates over the coastline so that public opinion is biased towards local social and economic interests. This paper proposes that a more participatory approach to decision-making would gradually change people's unsustainable attitudes.

In the Slapton Line case study facilitated dialogue could have:

- allowed the various interest groups to effectively explain their viewpoints.
- enabled the public to comprehensively understand all sides to the debate.
- allowed the local community to participate in the decision-making process rather than simply being consulted.

Public authorities either require personnel who are trained as dialogue facilitators or need to employ outside agencies who are experienced as dialogue facilitators.

More innovative means of consultation and participation need to be used where attitudes are particularly entrenched. For instance, Virtual Reality Geographical Information Systems (VRGIS) allow virtual reality simulations to show how an environment may change under different scenarios. The use of VRGIS on the web can allow a wide audience to gain an understanding of potential changes to the environment.

Those with the power to make the final decision should be made known to the local community. In order to avoid false expectations, the influence that consultation and participation will have on the decision needs to be made clear. A mismatch between what participants expect to gain from their involvement and the decision-maker's expectations should be avoided.

Early in the process shared views and common aims between stakeholders should be identified. Common ground should give the participants some impetus to work together to resolve differences of opinion. Stakeholders need to be honest and openly explain what cannot be done due to financial or technical constraints.

Project progress reports are important to keep the interested public informed, producing a more transparent process and counteracting the belief that authorities are withholding information.

Throughout the decision-making process participants should be able to criticise the consultation/participation process. The process should be flexible so that suitable amendments can be made to fully engage stakeholders.

During the consultation process decision-makers should not lose sight of why people should be involved in the decision-making process. Decision-makers, such as local authorities, should be mindful that participation could be regarded as socially valuable in its own right.

At the end of the decision-making process the participants should provide feedback on the successes and weaknesses of the consultation process. Good practice on engaging stakeholders in decision-making can then be applied to future scenarios. Good practice also needs to be shared between public authorities.

On the ground commitment is needed by those bodies that seek to actively engage the public. For instance, a community liaison officer could be used to maintain trust between stakeholders through dialogue. Increasing attendance at Parish Council meetings could be another method of improving consultation methods within a community. On large-scale projects, representatives of the community may be useful to act as receptors and distributors of information. Such people might be local business people, Councillors, teachers, postmen/women. These people have a high degree of face-to-face contact with individuals of the community. Personal contact and familiarity are two key factors in the creation of trust. This suggests that public bodies physically isolated from the areas where they are involved in decision-making would benefit from employing representatives who are based within communities. In the case of Slapton Line, local business owners could be more closely involved in the decision-making process.

Detailed guidance is required to ensure that any form of consultation exercise undertaken by a public authority is rigorous and produces meaningful results that can aid the decision-making process. Table 11 demonstrates how detailed guidance could be used to enable public authorities to engage the public effectively in decision-making.

Table 11. Example of detailed guidance for improving public meetings

Preparation for first public meeting:
<p>Write to all stakeholders and members of local community.</p> <p>State clearly and concisely what needs to be decided.</p> <p>List who is likely to have an interest and ask if anyone else should be contacted.</p> <p>Specify some idea of a time frame for the decision-making process.</p> <p>Give reassurance that communities will be consulted throughout the decision-making process.</p> <p>Provide time and date of first public meeting.</p> <p>State names of some representatives that will be in attendance at the meeting so that familiarity with peoples' names can begin.</p> <p>Advise that the attendee will receive further information prior to the meeting. This information will prepare them for the first meeting.</p> <p>Name places where more detailed information on the issues can be found.</p>
Public meetings:
<p>The participation process should involve a series of public meetings facilitated by independent people who aid the dialogue process. The public meetings should have organic rather than fixed agendas. Agendas of public meetings should not be predetermined. The participatory process should be organic in the way views are expressed. By being involved in the decision-making process the stakeholders develop "ownership" of the outcome. A rigid agenda will lead to attendees rightly or wrongly perceiving that the agenda makers are the ones holding the power in the meeting.</p> <p>Representatives at meetings should be consistent so that trust is established both between individual stakeholders and between the stakeholders and community.</p> <p>People may be updated on progress made in discussions by a dedicated website, emails, newsletters or through newspaper articles.</p>

6.4 Improvements to the Study

The study could have been improved in a number of ways and further research could be conducted to develop the findings of this paper.

The social characteristics of the sample survey could have been compared to census data for the locality studied. This comparison would show whether respondents to the questionnaire were truly representative, in terms of age, to the whole population.

The key stakeholders of the Slapton Line Partnership could have been sent a questionnaire or interviewed to discover their views on participation over the road issue.

The people that gave their contact details at the end of the questionnaire could have been contacted again with a follow up questionnaire. These people could also have been invited to a dialogue facilitated public meeting with their views before and after the event analysed.

More than one case study of consultation in coastal decision-making could have been used. Trends and differences between UK case studies would give a more comprehensive understanding of the general level of public participation in coastal decision-making on a national scale. Comparisons between case studies could have provided more detailed recommendations for future coastal community consultation exercises.

A broader literature review could have encompassed case studies of consultation and participation in decision-making including approaches in other countries.

7 CONCLUSION

Current estimates of future sea level rise mean that coastal managers must react to episodes of erosion and flooding in a strategic manner in order to avoid inappropriate short-term investment. Managing the coast will require the co-operation, understanding and popular acceptance of coastal communities. Strategic decision-making requires all interests, potential options and impacts to be explored. A truly integrative approach to coastal management will necessarily share responsibility in making coastal decisions between different interest groups. Co-operation, partnership, being pro-active, and having a long-term view of financial investment and the environment are critical to a strategic approach. If Shoreline Management Plans become statutory documents they could provide the mechanism to bring different bodies together to create an integrated and strategic policy framework for coastal management.

The literature review indicates that in the future coastal managers will be working under a strategic policy of managed retreat. A balance needs to be found between the strategic approach to coastline evolution around the United Kingdom and the impact that strategic decisions will have on local coastal communities. A changing coastal environment must be understood by affected local communities and adapted to in a sustainable way. Awareness of sustainability issues alone is not sufficient to change people's attitudes. Coastal managers are facing the challenge of involving local coastal communities in decisions about their futures when managed retreat may become the preferred option from an environmental and financial point of view. This paper proposes that deliberative dialogue between all interested parties will become increasingly necessary.

At the outset of discussion between decision-makers and local communities, differences of opinion over the topic of how to deal with coastal erosion and flooding may seem impossible to reconcile. Discussion of people's fears will enable decision-makers to work towards finding agreement on some, though not necessarily all, issues. Face-to-face contact and facilitated dialogue between local residents, business owners and other stakeholders is required to enable interest groups to explain their viewpoints. Trust and fairness of treatment must be integral to the involvement of local communities in collaborative decision-making. Participatory processes can create trust, mutual respect

and understanding between parties. In this way the process of participation is itself important rather than simply the outcome (decision). Through dialogue, understanding and trust can be developed as well as conflict resolution and consensus building. Harnessing existing communicators, such as local business owners, could be key to consensus building within some local communities.

Planning for coastal change will require a form of governance that allows communities to be involved in decisions that impact their lives. This paper highlights the need to develop means of engaging local coastal communities in dialogue about their futures. Participatory decision-making and consensus building within coastal communities will enable coastal change to be understood in terms of societal loss and gain rather than individual loss and gain. Organisations that are accountable to the public need robust communication strategies that are flexible to different situations. Participatory decision-making is a challenging task that will only become less onerous by sharing good practice and decision-makers being fully committed to public involvement.

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APPENDICES

**A STUDY OF PUBLIC CONSULTATION AND
PARTICIPATION IN LOCAL DECISION-MAKING**

Miss Debbie Crowther

Appendices

1. Draft questionnaire
2. Questionnaire survey sent to residents of Slapton, Torcross and Strete on 3rd July 2005
3. Covering letter to questionnaire survey sent out on 3rd July 2005
4. Supporting information sent out with questionnaire and covering letter
5. Margins of error calculation
6. Public opinions on future of the road and their visions for the coastline
7. Tables of results from questionnaire
8. Newspaper articles relating to Slapton Line
9. Bulletin from Slapton Line Partnership

Appendix 1

Slapton Line

Have you had **your** say on the future of the A379 between Torcross and Strete Gate?

This form should take **5 minutes** to complete.

This survey is for academic research for my MSc in Town Planning at University College London and is independent from any other study that is being carried out. The form may be returned to local shops/pubs named at the end of the questionnaire or by post.

Your opinions will remain **confidential**

If you would like to elaborate on any answer please attach additional comments.

QUESTIONS

Please tick relevant boxes

Do you...	Live locally	<input type="checkbox"/>
	Work locally	<input type="checkbox"/>
	Own a business locally	<input type="checkbox"/>
	Own a 2nd home in the local area	<input type="checkbox"/>
Are you...	Visiting the area from within Devon?	<input type="checkbox"/>
	Visiting the area from outside Devon?	<input type="checkbox"/>

Why is Slapton Line important to you?

Please rank (1 to 6)

1 = most important

6 = least important

Commute to work	<input type="checkbox"/>
Children to get to school	<input type="checkbox"/>
Walking/fresh air	<input type="checkbox"/>
Fishing	<input type="checkbox"/>
Access to services/shops/friends	<input type="checkbox"/>
National Nature Reserve	<input type="checkbox"/>
Other (please specify)	<input type="checkbox"/>

Are you aware of the Slapton Line Partnership?

If so what do you believe is its purpose?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

In January 2001 high tides and easterly storm waves resulted in a large volume of beach material being eroded from the beach head leaving a stretch of the A379 vulnerable to erosion and flooding. There is now a debate as to what the future holds in respect of this stretch of road.

Yes	No

Through discussion between all involved parties
at public meetings
Let the Local Government decide
Let all local people vote on what decision to take
Other (please specify)

Yes	No

Yes	No

Yes	No

English Nature
National Government
South Hams District Council
Devon County Council
Slapton Ley Field Centre
Whitley Wildlife Trust
Locals living in the area
Local business people
Other (please specify)

[illegible]

A current study by Scott Wilson consultants aims to determine an appropriate shoreline management response to the recent erosion events along Slapton Line.

Do you believe that public opinion is irrelevant and the consultants have already made their minds up?

Yes	No

Do you have any confidence that your views when asked will be fully taken into account?

1=very confident
5=no confidence

1	
2	
3	
4	
5	

Do you believe that in a situation of rising sea level, the sea can be held back from the land by the use of hard engineering (such as a concrete wall)?

Yes	No

How much money do you think would be reasonable to spend per year on maintaining the road in its present position

£ /year

Would you be happy for a district wide Council tax increase to keep the road in its present position?

Yes	No

Would you agree to the road being locally funded, for instance by a toll being put on the road?

Yes	No

Would you support a participatory study with the aim of creating a common vision for the future of the Start Bay coastline?

Yes	No

Of these groups who do you believe want a dialogue with the local population?

English Nature	
National Government	
South Hams District Council	
Devon County Council	
Slapton Ley Field Centre	
Whitley Wildlife Trust	
Local business people	
Other (please specify)	

Of these groups who do you trust and who do you not trust?

	Trust	Do not Trust
English Nature		
National Government		
South Hams District Council		
Devon County Council		
Slapton Ley Field Centre		
Whitley Wildlife Trust		
Local business people		
Other (please specify)		

Would you like to be involved in decision-making in local issues?

Yes	No

How would you like to be kept informed about Slapton Line?

Email
Website
Newspaper articles
Letters
Public meetings
Parish Council
Personal contact with a spokesperson
Other (please specify) _____

How regularly would you like to be updated on progress made about decision-making on Slapton Line? _____

Do you believe that you would be willing to listen to alternative points of view with an open mind before putting forward your recommendation?

Yes	No

Do you believe you would make time to attend regular public meetings?

Yes	No

Do you attend Parish Council meetings? If yes then approximately how many have you attended in the last 12 months?

Yes	No

Number _____

In your opinion consultation efforts so far regarding Slapton Line have been...

Tokenistic
Placative
Time Consuming
Encouraging
Educative
Unrewarding
Rewarding
Frustrating

Do you consider English Nature to be a custodian of the coastline?

Yes	No

Do you believe that the following groups are working well together in the decision-making process? English Nature, South Hams District Council, Devon County Council, Slapton Ley Field Centre etc. If not please specify why.

Yes	No

Please tick the statements you believe to be true:

The road on Slapton line should be protected in its current position whatever the economic cost

☐

The road on Slapton line should be protected in its current position whatever the environmental cost

☐

The social importance of the road on Slapton Line outweighs any environmental disadvantage

☐

A piecemeal approach to managing the coastline is not sustainable

☐

Sea level has risen over the past 100 years.

☐

Future sea level rise is inevitable

☐

A broad overall perspective of coastline change along the south west coast is required before considering what course of action is appropriate to Slapton Line

☐

A long-term perspective of coastline change is required

☐

Man will need to work with the natural processes rather than against them

☐

All interested parties should be involved in the decision-making process

☐

Management of Slapton Line will need to be flexible according to the dynamic nature of the coastal processes

☐

The road is/has become a political issue rather than an environmental issue

☐

The loss of the road would harm the national nature reserve

☐

The road protects a national nature reserve

☐

The environment would be considered less important if the sea were to enter the freshwater lake

☐

The fact that hard defences (such as a sea wall) might impact areas further along the coastline is not important

☐

It is important for people to look at the bigger picture rather than focus on their own personal interests

☐

What do you see as the future for the coastline between Strete Gate and Torcross?

What is your vision for the Start Bay Coastline?

Please return form to:

Slapton: The Village Shop, The Queens Arms or The Tower Inn

Torcross: The Village Store, Start Bay Inn, or The Torcross Hotel

Alternatively please post to Miss Debbie Crowther, Middlegrounds Farm,
Slapton, Kingsbridge, TQ7 2QZ (you are welcome to contact Debbie for further
information on this study)

Would you be willing to be contacted again in relation to this study? If so please
write your name and address here. You may wish to tear off this section so that
your answers remain confidential.

.....

Name:

Telephone:

Address:

Appendix 2

Slapton Line – residents and users of the road

Have you had your say on the future of the A379 between Torcross and Strete Gate?

Your opinions will remain **confidential**. This survey is for academic research for my Masters degree in Town Planning at University College London and is independent from any other study that is being carried out. My dissertation relates to public consultation and participation in local decision-making.

If you would like to elaborate on any answer please attach additional comments.

Section 1. Please tick all relevant boxes

Please see section 1 of additional information attached

1. Is the road on Slapton Line important to you?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

2. Were you already aware of the Slapton Line Partnership?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

3. Are you aware of the Slapton Line Partnership website?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

4. Have you visited the website?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

If yes, how useful is the website?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
very useful	useful	not very useful

5. Were you aware of the Slapton Line public exhibition held in Torcross 19 and 20 November 2004?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

6. Did you attend the public exhibition?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

If yes, how useful did you find the exhibition?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
very useful	useful	not very useful

Please explain your answer. How might the exhibition have been improved?.....

.....

7. Have you read any of the newsletters regarding Slapton Line?

<input type="checkbox"/>	<input type="checkbox"/>
yes	no

If yes, how useful do you find the newsletters?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
very useful	useful	not very useful

8. How would you like to be kept informed about Slapton Line in the future?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
website	newspaper articles	letters	public meetings	Parish Council

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (please specify)
none	email	personal contact with a spokesperson

9. How regularly would you like to be updated on progress made about decision-making on Slapton Line?

☐ once a year ☐ once every six months ☐ once a month ☐ not interested

Section 2.

In January 2001 high tides and easterly storm waves resulted in a large volume of beach material being eroded from the beach head leaving a stretch of the A379 vulnerable to erosion and flooding. There is now a debate as to what the future holds in respect of this stretch of road.

Please see section 2 of additional information attached

10. English Nature, local government departments, business owners, holidaymakers and the local population have different views on how this coastal stretch should be managed.

Do you think that these competing interests can be resolved satisfactorily? ☐ yes ☐ no ☐ unlikely

11. By what means do you think that a satisfactory outcome could be achieved? Please tick all relevant boxes.

☐ discussion at public meetings ☐ South Hams District Council decision ☐ Devon County Council decision ☐ let all locals vote on a decision

Other (please specify).....

12. Have the following groups been working well together in the decision-making process? English Nature, South Hams District Council, Devon County Council, Slapton Ley Field Centre etc.

☐ yes ☐ no

Please make additional comments

	yes	no	don't know
13. Have you ever attended any public meetings concerning the future of the road?	<input type="checkbox"/>	<input type="checkbox"/>	
14. If yes did you find these meetings useful? If no, why not?.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Did you have an input into the meeting(s)?	<input type="checkbox"/>	<input type="checkbox"/>	
16. Did the meeting(s) develop your understanding of the issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Did opinion differences between different people become smaller during the meetings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

A current study by Scott Wilson consultants aims to determine an appropriate shoreline management response to the recent erosion events along Slapton Line.

18. Do you have any confidence that your views when asked by the consultants will be fully taken into account?

☐ very confident ☐ confident ☐ don't know ☐ a little confidence ☐ no confidence

19. Who do you think will make the final decision on Slapton Line? You may tick more than 1 box.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English Nature	National Government	Devon County Council	South Hams District Council	Slapton Ley Field Centre
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (please specify)	
don't know	Whitley Wildlife Trust	local residents	local business people
			

20. Who do you think **should** influence the decision on Slapton Line? You may tick more than one box.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English Nature	National Government	Devon County Council	South Hams District Council	Slapton Ley Field Centre
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Other (please specify)	
don't know	Whitley Wildlife Trust	local residents	local business people
			

Section 3.

	yes	no	don't know
21. Would you like to be involved in the decision-making of local issues?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Would you participate in a study with the aim of creating a common vision for the future of the Start Bay coastline?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

23. Which of these groups want discussion with the local population and users of the A379?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English Nature	National Government	South Hams District Council	Devon County Council	Slapton Ley Field Centre	Whitley Wildlife Trust
<input type="checkbox"/>	Other (please specify).....				
Local business people					

24. Which of these groups do you trust? Please tick all boxes that apply.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English Nature	National Government	South Hams District Council	Devon County Council	Slapton Ley Field Centre	Whitley Wildlife Trust
<input type="checkbox"/>	Other (please specify).....				
Local business people					

25. Which of these groups do you not trust? Please tick all boxes that apply.

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
English Nature	National Government	South Hams District Council	Devon County Council	Slapton Ley Field Centre	Whitley Wildlife Trust
<input type="checkbox"/>	Other (please specify).....				
Local business people					

26. Do you attend Parish Council meetings?

☐ yes ☐ no

If YES how many have you attended in the last 12 months?

27. If NO, Would you make time to attend regular public meetings?

☐ yes ☐ no ☐ don't know

What would encourage you to attend public meetings?.....
.....

28. In your opinion consultation efforts so far regarding Slapton Line have been (please tick all relevant boxes)

<input type="checkbox"/> thorough	<input type="checkbox"/> interesting	<input type="checkbox"/> encouraging	<input type="checkbox"/> educating	<input type="checkbox"/> rewarding
<input type="checkbox"/> unrewarding	<input type="checkbox"/> frustrating	<input type="checkbox"/> time consuming	<input type="checkbox"/> a token gesture	<input type="checkbox"/> meant to pacify

Section 4. Please tick the statements that you believe to be TRUE
--

Is the road in danger of being washed away by the sea?

Yes within the next 10 years ☐
Yes within the next 50 years ☐
Yes within the next 100 years ☐
No ☐

All interested parties should be involved in the decision-making process

☐

Decisions on the future of the Line should be left to the Government and other professionals to decide

☐

The management of Slapton Line will need to be flexible according to the changing nature of the coastal processes

☐

A decision on the future of the road should be taken now and not changed

☐

It is important for people to look at the bigger picture rather than focus on their own personal interests

☐

Local businesses and residents are more important than what may happen elsewhere along the coastline

☐

There should be a limit on the amount of money spent on protecting the road in its present position

☐

The road on Slapton line should be protected in its current position whatever the economic cost

☐

I would agree to a district wide Devon County Council tax increase to keep the road in its present position

☐

I would agree to the road being locally funded, for instance by a toll being put on the road

☐

Section 5.

What do you see as the future for the coastline between Stete Gate and Torcross?

What is **YOUR VISION** for the Start Bay Coastline?

Section 6.

About You

1. Do you ☐ Live locally ☐ work locally ☐ own local business ☐ own a local second home

2. Which village/town are you from?

3. Age

☐ up to 25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ 66-75 ☐ 76+

What is your occupation? Please tick relevant box or specify here

☐ employed ☐ house wife or husband ☐ student ☐ looking for paid employment ☐ retired

THANK YOU FOR ALL YOUR HELP

Please return form to:

Miss Debbie Crowther, Middlegrounds Farm, Slapton, Kingsbridge TQ7 2QZ

Would you be willing to be contacted again in relation to this study? If so please write your name and address here.

.....

Appendix 3

Middlegrounds Farm
Slapton
Kingsbridge
Devon
TQ7 2QZ

3 July 2005

Dear Sir/Madam,

My name is Debbie Crowther. I live in Slapton and for the last three years I have been studying part-time for a Masters degree in Town Planning at University College London.

I am now in my final year and must complete a 10,000 word piece of research on a topic of my choice. I am interested in local democracy and how people can participate in local decision-making.

I am using a local case study of the road on Slapton Line (between Torcross and Strete Gate). As I am sure you are aware, the road has been subject to erosion and flooding in recent years. As part of my research I need to send out questionnaires asking local residents for their views on this important issue and how they feel they have been and would like to be involved in discussion about the future of the road.

I would be really grateful if you could fill out the questionnaire and return it to me in the prepaid envelope within the next two weeks.

Your help is much appreciated.

Yours faithfully,

Debbie Crowther

Appendix 4

Additional Information

1. Slapton Line Partnership is an organisation made up of the following bodies;

- Devon County Council
- South Hams District Council
- English Nature

Input is also received from:

- Department for the Environment, Food and Rural Affairs (DEFRA),
- The Environment Agency
- The Whitley Wildlife Trust and
- Slapton Ley Field Centre

The Partnership has been formed to decide how best to deal with the potential future erosion of the Slapton Line and its effect on the road, the environment, and the community.

2.

- English Nature has an interest in Slapton Line due to its status as a Site of Special Scientific Interest and National Nature Reserve.
- Devon County Council is the strategic planning authority and highway issues are one of their responsibilities
- South Hams District Council has some discretionary powers to undertake coastal defence work and also has a responsibility for promoting economic and social well being of the area.
- Whitley Wildlife Conservation Trust is the landowner of most of beach and nature reserve.
- Slapton Ley Field Centre leases the land from Whitley Wildlife Conservation Trust and manages the nature reserve and field centre at the Ley.
- The Environment Agency has discretionary powers for tidal flood protection.
- DEFRA is the Government department with policy responsibility for coast defence, it has discretionary power to grant aid for coast protection works through district councils.

Appendix 5

Statistical Note

The following paragraph is taken from Veal (1997);

The sample value of a statistic has a certain probability of being within a certain range either side of the real value of the statistic. That range is plus or minus twice the standard error of the statistic. The size of the standard error depends on the size of the sample and is unrelated to the size of the population. The statistical formulae for 95% confidence interval (CI) for normal distribution for percentage p is: $CI = 2 \sqrt{p(100-p)/(n-1)}$

Appendix 6

- 1 Without prompt action and with global warming the coastline will be altered.
 - 2 How it is now.
 - 3 Hopefully it will remain as it is in July 2005.
 - 4 Not sure.
 - 5 Global warming will be the decider. Its severity can be foreseen.
 - 6
 - 7 Road could be retained if a low level sheet-pile wall was to be constructed along the length of the line, for a minimal cost in comparison to other sea defence schemes constructed and proposed for other sections of the UK coastline.
 - 8 A new proposed route should be drawn up for the benefit of all both local, and tourists. Very important tourist attraction so consider the economics of all this.
 - 9 Continued erosion. But one must remember that the road has only been made impassable once in many years. If the study is to be believed - it is not in imminent danger of being lost. But should the road go it must be dealt with. It cannot be allowed to become a dead end cul de sac!
 - 10 A very blinkered vision from English Nature, Slapton Field Centre, Whitley Trust
 - 11 It is an important road which should be kept open whatever the cost. In view of the public funds used to save Torcross and its relatively small number of residents, public funds should be available to make the road secure in an environmentally acceptable form.
 - 12 The road should be maintained and moved as the ridge moves inland if and when this happens. Ideally, additional supplies of shingle should be brought in to repair the shortfall caused by the dredging a century ago.
 - 13
 - 14
 - 15 In the short to middle term it will (remain) all with minimum money spent on it whilst a myriad of communities all spend years researching the problem at enormous expense and arriving at answers which to residents of standing have been blindingly obvious right from the start.
 - 16
 - 17 Managed retreat of the road until it becomes impossible to move it any closer to the Higher or Lower Ley.
 - 18 Very important should be maintained at all costs. Vtally important to all main towns Kingsbridge, Dartmouth etc.
 - 19 I think that it is inevitable that the road will be reclaimed by the sea at some point in the future. However much talk there is about "options" I do not believe that the money will be found to implement effective long term protection measures.
- For the coastline to be carefully monitored for erosion etc.
- As it is.
- Hopefully it will remain as it is in July 2005.
- Music on the beach in a festival only at the Strete Gate end other than that I don't know.
- I would like it to be as now, but I think that's optimistic.
- If left to nature's processes, as English Nature propose, road will eventually be lost, local businesses will suffer, SSSI will no longer be SSSI but a salt water lagoon. A low-level sheet pile concrete topped sea defence will prolong the roads life (one opposite Torcross car park built 70+ years ago), Field Studies Centre able to keep operating, maintained road links between Kingsbridge and Dartmouth, tourism and business kept alive in the area.
- To remain accessible to the public. An area that loses its revenue through lack of tourism soon becomes unkempt and unattractive. Whilst we must be aware of endangered species and nature - don't let humans become endangered in the area, they are able to pay for its upkeep.
- The sea may cause a new problem seeing hopefully to the future why not put a bridge over the whole of the road. There should be enough expertise in this country to make a good road from the bridge.
- I would like to see the road moved back to the same line as the "new" stretch, including the car parks. Then the beach left to nature for 25 years being monitored by SFSC once a year to see what is really happening long term.
- Do more maintenance and keep it beautiful for lots of tourism.
- Ultimately the destruction of the road, then a breach of the ridge and Slapton becomes a dead end village.
- Should be maintained in present form as much as possible. Not only for visitors, residents more important.
- Let nature take its course.

- 20 For the local people in Slapton to use.
- 21 If funding is available to repair road wash ways, then the road is secure for... and such funding should be made available. Longer term with sea level rise, the line will disappear. Against other demands on funding (flooding of London, Plymouth etc) there is no chance the road will be maintained on either its present or on an inland route (which would be very detrimental) anyway.
- 22 At the moment I have no confidence that the Slapton Line road will be maintained over the next 50 years. All authorities seem to be prepared to invest minimum funds in makeshift, short to medium term solutions. I believe a much more radical approach is necessary.
- 23 I don't think King Canute can hold back the waves - sooner or later the waves will "attack" the road again. There's space for another "loop" road to be built towards Torcross if necessary. Eventually the sea will have its way and the ley will become salty and the road will have to be closed.
- 24 To maintain its present appearance as much as possible.
- 25 In the long term the sea will win, but what is the long term? 10, 50, 100 years. To spend money on defending the road you need to know about future sea levels with respect to time. If there is no main road or replacement road inland there will be terrible traffic problems along B45ng the back lanes in the area.
- 26
- 27 English Nature and the Whitley Trust have an agenda that puts their "scientific views" above the interests of local residents, businesses and visitors.
- 28 A new road eventually being built between the Ley and farmland.
- 29
- 30 If there is no result soon there will be irreparable damage to the coastline. One bad storm will result in the road being washed away as 3 years ago. The ley will remain separated from the sea.
- 31 Pretty bleak as English Nature hold the only brief from Government with any clout, but English Nature's view of the future is of one devoid of human occupation, influence or benefaction.
- 32 Depends on decisions taken regarding road.
- 33 There will be a ridge of shingle there in 50 years but if English Nature have their way no road. PS lived here since 1940.
- 34 The same as it is today.
- 35
- 36 A complex inter-relation between time, natural processes, money. Depends on abilities of all parties to remain flexible in their responses to these complexities as they are revealed. The road should be realigned (or shingle barriers supplemented) as long as financially and environmentally possible.
- 37
- It is good for business and good views.
- Maintenance of the current low level of development.
- Why not see this problem as an opportunity to do something spectacular - which need not necessarily be very expensive. I would like to see a programme to elevate the road on pikes all the way along the Line - by about 5 feet. Leave the beach and ley alone to be moved around and changed by nature. The storms would not affect the elevated road and would provide stunning views of the Slapton area. Elevated roads in Scandinavia are immensely popular and have stood test of time. The technology is really quite simple.
- I would like to see a road built inland - avoiding Slapton village so that the sea can "do its worst" and destroy the present road when it wants to. There will be peace on my daily walks - no traffic hum - but I will be able to leap in my car and drive to Dartmouth easily (avoiding Gara Mill).
- To maintain its present appearance as much as possible.
- This is a vital economic and social link of long standing. It should be maintained in its current position indefinitely.
- Let nature take its course.
- All parties have resolved their differences. The future of the road, ley and coastline is settled and all emergencies have been taken into account. In 100 years, future inhabitants and visitors will find this area ideal and thank the people in the early 2000s for solving all present and future problems.
- To preserve this bay for its inhabitants, tourists and student researchers in the form it has had for the last 2 millennia and not allow the mad vision of degradation of human involvement in the landscape as seen by English Nature to become reality.
- To remain the same as now.
- Get English Nature out of the way, there will be a road there for years.
- The road to stay in its present form by protecting it by steel piles which would not be visible.
- A changed, indented profile in response to global warming, climate change and sea level rise.
- For villages to accept cul de sac status and see it as an opportunity ...

- 38 0
- 39 If there is another breach of road, let local folk with Devon County Council sort it out with local contractors who have the best knowledge. Sack all the advisors and consultants and put money to the road. 0
- 40 It will finally be eroded away due to vested interests and/or amid petty mindedness. 0
- 41 To keep it open. 0
- 42 0
- 43 In short term road needs to be kept open and it will be (?). In long term (20 years +) will need Managed retreat, with investment to allay social/economic effects (which will be greater than in the to allow sea to have its way, provided investment made in road schemes for villages affected. similar case of Porlock, North Devon, where sea is breaching a shingle ridge). 0
- 44 Being kept as a nature reserve for as long as possible. Kept as an area of outstanding natural beauty. 0
- 45 My husband who is a sailor with a small yacht thinks it could be developed as a marina! It would certainly bring business to the area. I am rather more realistic and think that large boulders could build a sea wall. Maintain it at all costs and the Ley for wildlife. 0
- 46 Continued use of this unique tourist and business link between Dartmouth and Kingsbridge. see www.saveslaptopcoastroad.co.uk 0
- 47 0 A gradual encroachment by the sea. 0
- 48 0
- 49 If nothing is done to maintain and keep the road the whole area of the South Hams will go into That the road is protected and maintained as a major through route. social and economic decline. 0
- 50 Must be retained if possible. Keep it as it is now. 0
- 51 Hopefully to stay open. Perhaps a traffic survey needs to be carried out to show how many people, local and visitors use the line. I see too much opposition to the line being closed permanently. Unless an alternative route is opened that is practical and can withstand the traffic. 0
- 52 Move the road towards the Ley as the sea encroaches pushing shingle off the road towards the Ley. 0
- 53 0
- 54 0
- 55 Continuing as before. Continuing much as before but with added pressures for commercialisation. 0
- 56 Hopefully to maintain a clear route along the coast road connecting villages. Hopefully to stay the same. 0
- 57 The main link to all surrounding villages. For it to be kept open forever. 0
- 58 The same as it has always been. To stay as it is. 0
- 59 I see that the coastline will eventually be closed due to its maintenance being too much. However, it would be a great shame and a disaster for local businesses and residents. I would love the Start Bay coastline to develop and have more water sport activities. I would love it however to keep its peaceful family atmosphere. 0
- 60 Maximum effort needed to preserve an asset to an AONB which will remain a vital tourist attraction and a fundamental necessity to the surrounding area. Sensible common sense management which is not dominated by minority interests by remote bodies who might have their own priorities which ignore the importance of the area to the local population. 0
- 61 0
- 62 0
- 63 Managed retreat, very flexible time scale. Alternative routes - both emergency and permanent need to be identified and publicised as soon as possible. People's mindsets need to be gradually changed to adapt to future possibilities. It would be sad to see the Ley go but it is only part of the huge cycles of environmental change and we may have no choice if global warming effects speed up. 0

- 64 I see no reason to spend large amounts on coastal defence. But would like to see some compensation for losses made by local businesses if the final decision is to close the coast road. 0
- 65 The road will go eventually in about 50 years (?) but provision must be made for similar road not through villages.
- 66 Possibly a long period of little change or perhaps a cataclysmic one. Either way the village of Torcross will probably experience property price slow down and insurance problems. This may affect the local economy. The flora and fauna will adapt to the changes depending on the severity of climate change and the area will continue to be used as it is unless change is too great.
- 67 0
 I do hope it can be kept open - it is vital for those who use the village shops and post office, for those who use the Chillington medical practice and for those of us who are churchgoers - we are closely linked with Stokenham church with contacts between clergy and readers and the parishioners. My butcher serves meat to our village and needs our trade.
- 68 0
 The coastline is a beautiful amenity as well as a vital connection between South Hams villages. We would all be infinitely poorer without the road - socially, spiritually and economically. Many local businesses (restaurants, pubs, shops) need the visitors as well as the residents to keep them viable.
- 69 0
 Hopefully a road for local and visitors to use. If not a road which will closed when storm and open again as soon as possible after.
- 70 It is important that the road is kept open for the well-being of the South Hams area.
- 71 It is essential the road is kept open - there is no other major road to join the communities together (economically). This is a busy, well used road throughout the year. This is a popular holiday centre - if easy access is destroyed there would be serious economic effects on local business and people, also an Area of Outstanding Beauty would be lost to many visitors. Devon County Council have a duty to keep roads open (there is never any quibble about repairing the railway line at Dawlish).
- 72 A379 will be wasted away in places.
- 73 I would like to see the road remain open.
- 74 It will eventually disappear if governing bodies do not realise how important it is to local people and take steps to protect it.
- 75 With climate changes there appears to be a strong likelihood of rising sea levels so it will become eroded unless action is taken.
- 76 A sea-defence system to be put in place to maintain the road. Not just for locals, but it is helpful for the tourism industry. People come to see the Ley and the sea and the road between. It is unique.
- 77 I think that reaching a decision that pleases everyone is almost impossible. Protecting the road is pointless, as the problem of sea level rise is greater than can be tackled locally. This debate will be a long one!
- 78 0
 Long-term I think that the road network inland needs to be improved. An option of managed retreat, where the Ley is allowed to become brackish seems most likely. It would be a shame to lose some of the existing habitats, but also a great opportunity to see how this environment evolves. Effective coastal defences would be costly and short term; so long-term, I think that the road should be removed and nature allowed to take control.
- 79 0
 Leave well alone!
- 80 Try to maintain the unspoilt beauty with the minimum of interference and also maintain the coastal road. 0

- 82 With global warming as it is, road will disappear in future due to sea levels projected rising.
Protection would mean National Government finance.
- 83 I can't see that if the road is breached, that there is an economically viable alternative route available on the coast side of Slapton village.
- 84 The coastline should be allowed to revert to natural habitat. There are precious few sites remaining of the type between Strete and Torcross, it is an Area of Outstanding Natural Beauty. Slapton, Torcross and Strete are served by other roads which could be upgraded.
- 85 I don't believe the coastline is under immediate threat especially if the shingle taken out of the bay to build Devonport docks is returned.
- 86
- 87 Status quo. 0
- 88
- 89 That it remains a nature reserve and the wildlife must take priority over the road.
0
- 90
- 91 The road is essential. 0
- 92
- 93
- 94 Either it will be retained or we will lose freshwater site and road will be placed inland or a sea wall built, no road? And freshwater site preserved? 0
- 95
- 96 I see it as a place of natural beauty which should be protected at all costs for future generations whilst this can be achieved without spoiling such beauty. 0
- 97
- 98 That nature will be allowed to do what it does next. The link road is less important.
- 99 Changeable. Little financial input from any authorities. Eventual loss of the Ley. Torcross, Slapton and Strete to become peninsula villages.
- 100 I suspect no real action will be taken until another serious erosion incident occurs.
- 101 I rather suspect "nature" will dictate what will happen. Global warming and sea level rises will probably determine the future of this coastline as elsewhere in the UK and worldwide.
- 102 I believe that the Government will back English Nature in their "bid" to allow nature to take its course. With local and central government not wanting to spend out on coastal defences they will compensate those few businesses that are in Torcross and go back to their offices and nice houses in London and the city. The present Government has already shown that the bigger picture does matter to them - but at the expense of the finer details ie communities and small businesses.
- 103 I think that the coastline road is of extreme importance for local residents and businesses. There is no economical alternative route to Kingsbridge.
- 104 For the few times that the road is breached it is usually just a clean and sweep operation. The problem is the Slapton Ley FC and people who do not live in the area.
- 105 0
- 106 As there is no sea defence all the way to Strete Gate, the sea will undermine it from time to time
time/season to season 0
- Road to remain with sea defences financed by National Government but not likely!
- Divert the A379 at Stokenham to Strete if possible. Torcross should still attract a good tourist trade, with all their facilities.
- It is inevitable that the sea will take the road. Sea levels will rise 30cms in the next fifty years; this will translate into storms, the like of which we have never known. The only option is to build a replacement road further inland - ultimately that will be the cheapest option.
- I believe the coastline is so unique it should be preserved by sensible measures such as returning the shingle. Torcross is a thriving community and the local residents know best how to care for this coastline and not English Nature.
- 0 Kept as it is. The Ley is unique.
- Status quo.
- 0
- Let nature take its course.
- 0 If the natural ***** are not controlled the village end of the Ley will end up like the Strete Gate end, completely submerged.
- 0
- 0
- 0
- I would love the road to be retained as it is so unique and special and I enjoy visiting the whole area and walk from home via Slapton Ley so would hate to lose the freshwater site.
- 0
- I see it as a place of natural beauty which should be protected at all costs for future generations whilst this can be achieved without spoiling such beauty.
- 0
- Nature is allowed her own course - people then find their own solutions to take it forward.
- To import and position the 650,000 tons of shingle previously removed for the construction of Plymouth harbour.
- The ley and coastal road should be protected and maintained at any cost.
- Nature usually overrides man's vision in this kind of scenario.
- No-one knows what will happen to the road in the future but an alternative road around the Ley if viable. More all year round attractions in the Torcross area - more shops, boat trips, more about the history - people are interested, many people come to see the tank but more is needed, more about the wildlife, one bird watching hut for the whole of the Ley is not sufficient - more info about what is here. English Nature seem to think that its worth closing an A road over so why do people just come to the beach.
- Continuous monitoring of coastline is essential, but confident that any future problems can be resolved with Council road funding.
- The Leave it as it is, even if it needs help.

107	time/season to season.				0
108	A lot of petty minded, self centred arguing from a lot of small minded fascists.			To let nature take its course. I believe that a coastline without a road on it would - in time - be a huge asset to the area - particularly Torcross - as it would be last stop for trade, tourists etc. It would certainly be nicer down there if there weren't any cars!	0
109	There is a proposition to build 30 houses in Strete of which 2/3 are to be for families. There is absolutely no point in building houses if Strete becomes a cul-de-sac, apart from the fact that there are few jobs in the area.				0
110	I wish I knew.			Keep it as it is.	
111	Managed, unobtrusive defence to keep the road open.			To retain its natural beauty, but keeping it accessible for people to enjoy.	
112	As a continuing managed resource for as long as possible.				0
113					0
114	Gradual decline in road condition as it is moved back in the face of marine erosion. The position will eventually become untenable and road abandoned. Area becomes saline/intertidal with shingle banks forming and disappearing according to wave conditions. Attains a form of equilibrium relative to wave height/frequency.			Gradual decline in road condition as it is moved back in the face of marine erosion. The position will eventually become untenable and road abandoned. Area becomes saline/intertidal with shingle banks forming and disappearing according to wave conditions. Attains a form of equilibrium relative to wave height/frequency. Encouragement for local social and business communities to appreciate that they also survive in a dynamic environment, and must embrace change. This will need support through reorganised infrastructure of roads, health and education catchment areas etc, plus assistance for local businesses to readjust to developing situation - and away from mass transport dependence.	0
115	In my opinion the future of the coastline between Strete Gate and Torcross is not very promising because the actual policy of Westminster is "wait and see" rather than taking preventive actions to avoid further catastrophes and as usual people and business are coming very low on the priorities list. It is regrettable but that is the case.			I believe that very little attention has been given to the opinion and reasonable proposals of members of the Slapton Line Partnership. According to one of them who has been all his life working all over the world as a civil engineer estimated that year by year of what would be financially viable could at the time of the estimate (2003) be in the region of a quarter of a million pounds and would last for a hundred years as it has done in Holland, Belgium as well as other countries. Now that there are EU funds available for that sort of project but unfortunately the UK has a tendency of wanting to do everything on its own and getting the very controversial EU rebate into the Treasury to be used for something else the Government wants to do and for which the people have no control at all.	0
116					0
117	Pretty hopeless unless action is taken soon.				0
118	It should be maintained.				0
119					0
120					0
121					0
122	Feel Slapton Ley as an SSSI should be protected. Problem is connection between Kingsbridge/Dartmouth 5 mile lane could not cope with additional traffic of road closed but where to put another road?			Would be good if the Line Strete Gate to Torcross could be closed to traffic - bikers use it as a speedway. Business at either end would be affected. Resulting congestion in Slapton might be horrific?	0
123	Not much change until rising sea levels swamp the Line.			Removal of road, installment of beach tractor like at Burgh Island.	0
124					0
125	Unpredictable			Could be determined by global warming and predicted rise in sea level.	0
126	Protected			Coastline protected. Ley remains fresh water.	0
127	Must be maintained.				0

- 0 Preserving the current state of amenities and facilities without further development but without further loss of infrastructure.
- 129 No decision will be made because line is governed by three parish councils Stokenham, Slapton, Strete and they all have different ideas. SHDC cannot afford anything, DCC might get involved but their representative lives at Hope Cove so is not involved. English Nature want to allow the sea to breach and flood the ley but have not done any definite plans as to levels etc.
- 130 It must be kept.
- 131 I am optimistic that the road will not be washed away. Should it disappear I would wish its replacement to remain in its present position for the benefit of the community and its commerce if this could be achieved with minimum loss to the natural environment.
- 132 0
- 133 We have to be careful not to ruin one of the most spectacular places in Europe.
- 134 When the road goes I see a fantastic opportunity for a natural environment without vehicles, a haven for wildlife and green tourism. Local residents would have to adapt to the changing conditions.
- 135 Nothing much changing until the weather and tide makes a big enough impact to force new assessments.
- 136 0
- 137 Coastal erosion is happening. The road will eventually be washed away, which will have a large impact on local residents and tourists. This will affect the Council also as less money will come into the area.
- 138 Bring the road inland to the other side of the reed beds at the bottom of the hill. Use bailey bridge type structure in this site to elevate the section of road (ten to twenty feet) from Strete Gate to the Slapton turn off.
- 139 I am too ill informed to give an educated opinion. However having lived here for 27 years, Frogmore, Slapton. Arriving just after the massive South East storm of February '79. Then experiencing the '01 devastation of the road. I think that the road should be on higher land on the other side of the Ley. I feel that in the next thirty to fifty years the sea may encroach, but this is such an amazing stretch of coastline it is important that it is accessible by road.
- 140 Hopefully to remain as it is - providing a connection between Strete and Torcross access to the beach and encourage Local business to thrive. Should the road be removed local business will seriously suffer, access to the villages seriously compromised.
- 141 0
- 142 The road should be maintained as a through route.
- 143 The boulders first put in place should have stayed in position and been covered up with the shingle that has been moved from Strete Gate to the damaged area. This would have provided all the protection that was necessary for the next fifty years . The original road should have been left where it was as an additional barrier instead of being dug up.
- 144 Not good.
- 145 In an ideal world it should remain as it is, However in view of possible climatic change due to global warming this is almost bound to change. The economic cost of preventing such a change may become prohibitive
- 0 Seasonal shaping of the shingle by bulldozers as takes place every autumn on Seaford beach in Sussex. It happens there very successfully. Why not here.
- Keep it as it is.
- The road needs to be protected as there are no alternative roads which can be used to reach the villages affected.
- To be kept open for all time. Money was spent without any thought its called throwing money down the drain. Road should be higher to last many more years the Ley should be kept fresh.
- In an ideal world it should remain as it is, However in view of possible climatic change due to global warming this is almost bound to change. The economic cost of preventing such a change may become prohibitive

Appendix 7

How regularly people would like to be updated

	Number of people	% of people
once a year	14	9.7
once every six months	96	66.2
once a month	22	15.2
not interested	2	1.4
No answer	11	7.6
Total	145	100.0

Do people think that competing interests can be resolved

		Number of people	% of people
Resolution of competing interests	No answer	6	4.1%
	unlikely	65	44.8%
	no	12	8.3%
	yes	62	42.8%

Attendance at public meetings

		Number of people
Attendance public meetings	yes	86
	no	57
Usefulness of meetings	yes	55
	no	24
	don't know	7
Input into meetings	yes	22
	no	70
Develop understanding	yes	61
	no	23
	don't know	3
Differences of opinion	yes	14
	no	55
	don't know	19

How could a satisfactory outcome be achieved

	Number of people	% of people
Discussion at public meetings	61	42%
South Hams District Council decision	35	24%
Devon County Council decision	28	19%
Let all locals vote on a decision	98	68%

Confidence that individuals views will be considered

	Number of people	% of people
no confidence	35	24.1%
a little confidence	48	33.1%
don't know	43	29.7%
confident	12	8.3%
very confident	0	0.0%

Who people think will make and should influence final decision

	Number of people	% of people
Decision by English Nature	43	30%
Decision by National Government	47	32%
Decision by Devon County Council	75	52%
Decision by South Hams DC	46	32%
Decision by Slapton Ley FC	13	9%
Don't know (final decision)	11	8%
Decision by Whitley Wildlife Trust	27	19%
Decision by local residents	34	23%
Decision by local businesses	28	19%
Other (final decision)	3	2%
Influence by English Nature	38	26%
Influence by National Government	27	19%
Influence by Devon County Council	55	38%
Influence by South Hams DC	79	55%
Influence by Slapton Ley FC	38	26%
Don't know (influence)	2	1%
Influence by Whitley Wildlife Trust	41	28%
Influence by local residents	123	85%
Influence by local businesses	99	68%
Other (influence)	1	1%

Number of people would like to be involved in public meetings and creating a common vision for the coastline

	Number of people	% of people
Involved in decision making	86	59.3%
Participate in common vision study	89	61.4%

Who do people trust

Who do people trust?	Number of people	% of people
English Nature	29	20%
National Government	10	7%
South Hams DC	46	32%
Devon County Council	29	20%
Slapton Ley FC	43	30%
Whitley Wildlife Trust	35	24%
Local businesses	79	55%
Other	10	7%
Who do people not trust?		
English Nature	72	50%
National Government	71	49%
South Hams DC	43	30%
Devon County Council	51	35%
Slapton Ley FC	42	29%
Whitley Wildlife Trust	43	30%
Local businesses	16	11%
Other	0	0%

How long people think before the road is in danger of being washed away

	Number of people	% of people
Within next 10 years	55	38%
Within next 50 years	62	43%
Within next 100 years	21	15%
No danger of being washed away	6	4%

People's views on the road

	Number of people	% of people
All interested parties	99	68%
Left to Government and other professionals to decide	12	8%
Flexible management	92	63%
Take decision now	40	28%
Bigger picture	64	44%
Local businesses/residents important	68	47%
Limit on money	37	26%
No limit on money	60	41%
Devon County Council tax increase	37	26%
Local funding of road	30	21%

Age of respondents

	Number of people	% of people
up to 25	2	1
26-35	9	6
36-45	10	7
46-55	22	15
56-65	47	32
66-75	36	25
76+	18	12

Occupation of respondents

	Number of people	% of people
Employed	66	45.5
House wife or husband	4	2.8
Retired	74	51.0
Missing	1	1

Appendix 8

Appendix 9

